The single sign-on specs created by Microsoft and Sun may help users in the future. But some can't wait. PAGE 4

Pass it on: Paul M. Ingevaldson tells your CEO all he needs to know about why the CIO should report to the chief exec. PAGE 50

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MAY 23, 2005 • VOL. 39 • NO. 21 • $5/COPY

Security Tools Tapped For Compliance Projects

Users link devices for capturing info about IT security incidents to corporate servers

BY JAIKUMAR VIJAYAN

Security event and information management appliances that were originally designed to help IT managers identify and deal with network threats are now finding new uses as regulatory compliance reporting tools within a growing number of companies.

The trend is being driven by the ability of such products to capture and correlate the torrents of log data generated by security devices, networking equipment, and database and application servers, IT managers and analysts said last week.

"A large percentage of the customers we're speaking with originally purchased these tools for aggregating and correlating security data," said Amrit Williams, an analyst at Gartner Inc. "Now they're telling us that they're using [the devices] for regulatory compliance."

For example, Calpine Corp., a San Jose-based power producer, purchased a security event management appliance from Network Intelli-

Compliance, page 14

INSIDE

The SEC reduces the IT controls that must be tested for Sarb-Ox compliance, but the news isn't all good. **Page 5**

EMC's Midrange Disk Arrays Cannibalize Symmetrix Sales

BY LUCAS MEARIAN
NEW ORLEANS

Sales of EMC Corp.'s Clariion midrange storage systems are skyrocketing — but the company acknowledged last week that some of the growth is coming at the expense of the Symmetrix arrays that were once its bread and butter.

Users at the EMC Technology Summit here said the vendor continues to bolster the Clariion line with high-end functionality once reserved for Symmetrix, such as data mirroring, snapshot copying and dynamic provisioning.

"They've added feature functionality and performance to make [Clariion] what the

EMC, page 12

NEWSPAPER

Sears Ends IT Pact; CSC Seeks Payment

Retailer says outsourcer breached contract; CSC claims that Sears schemed to avoid fees

BY CAROL SLIWA

Sears, Roebuck and Co. ended its 10-year, $1.6 billion IT outsourcing agreement with Computer Sciences Corp. after just 11 months. But the companies now face arbitration on a prickly dispute over the grounds of the cancellation and whether Sears has to pay termination fees to CSC.

At stake, according to motions that CSC filed April 25 with the U.S. Court of Appeals in Chicago, is roughly $96 million in termination fees. CSC claims that is the amount Sears should have to pay to end the contract.

Sears said in a May 11 filing with the U.S. Securities and Exchange Commission that it had cause to pull out of the contract, citing CSC's "failure to perform certain of its obligations." The retailer added that it expects to incur no "material" penalties as a result of the termination.

But in its own SEC filing last week, CSC countered that Sears' attempt to end the contract for cause was "contrived to avoid or reduce" the termination fees that the outsourcing vendor says it is owed.

Sears-CSC, page 55

MORE ONLINE

CSC tried to get all court records related to its case against Sears sealed:
QuickLink 54535

The looming increase in job turnover and retirements means that succession planning for key IT players is now a necessity, reports Thomas Hoffman. Page 39

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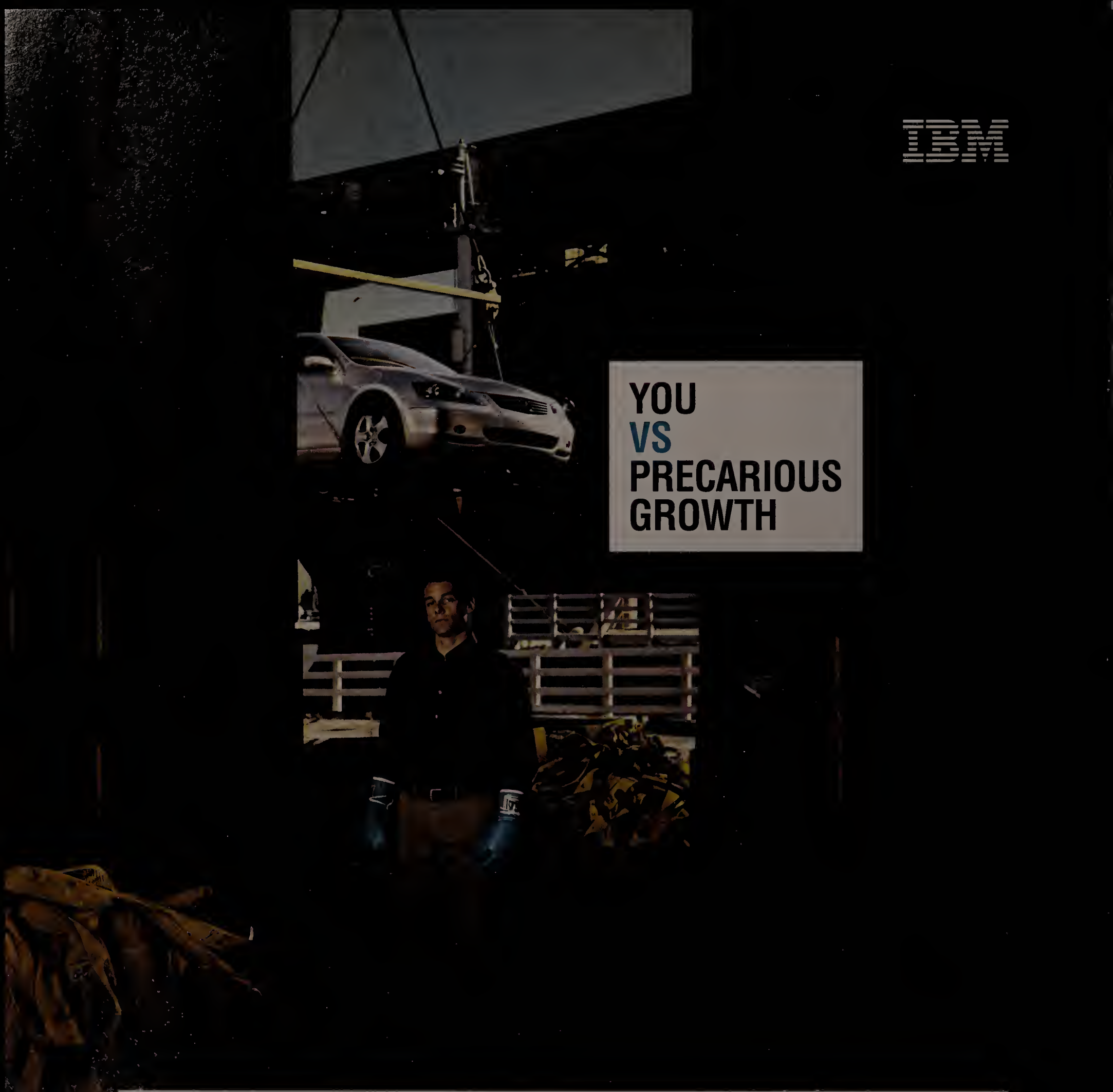

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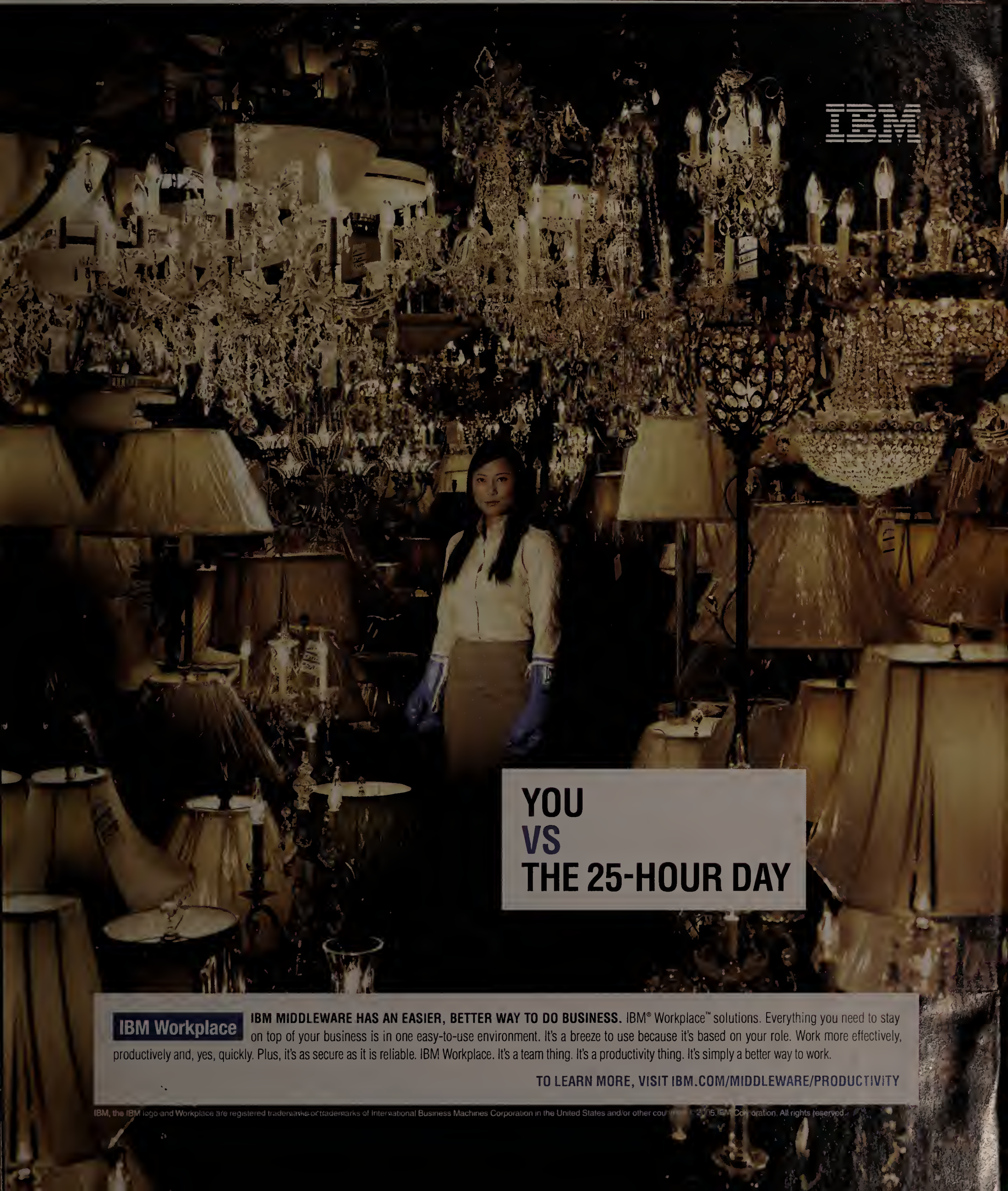

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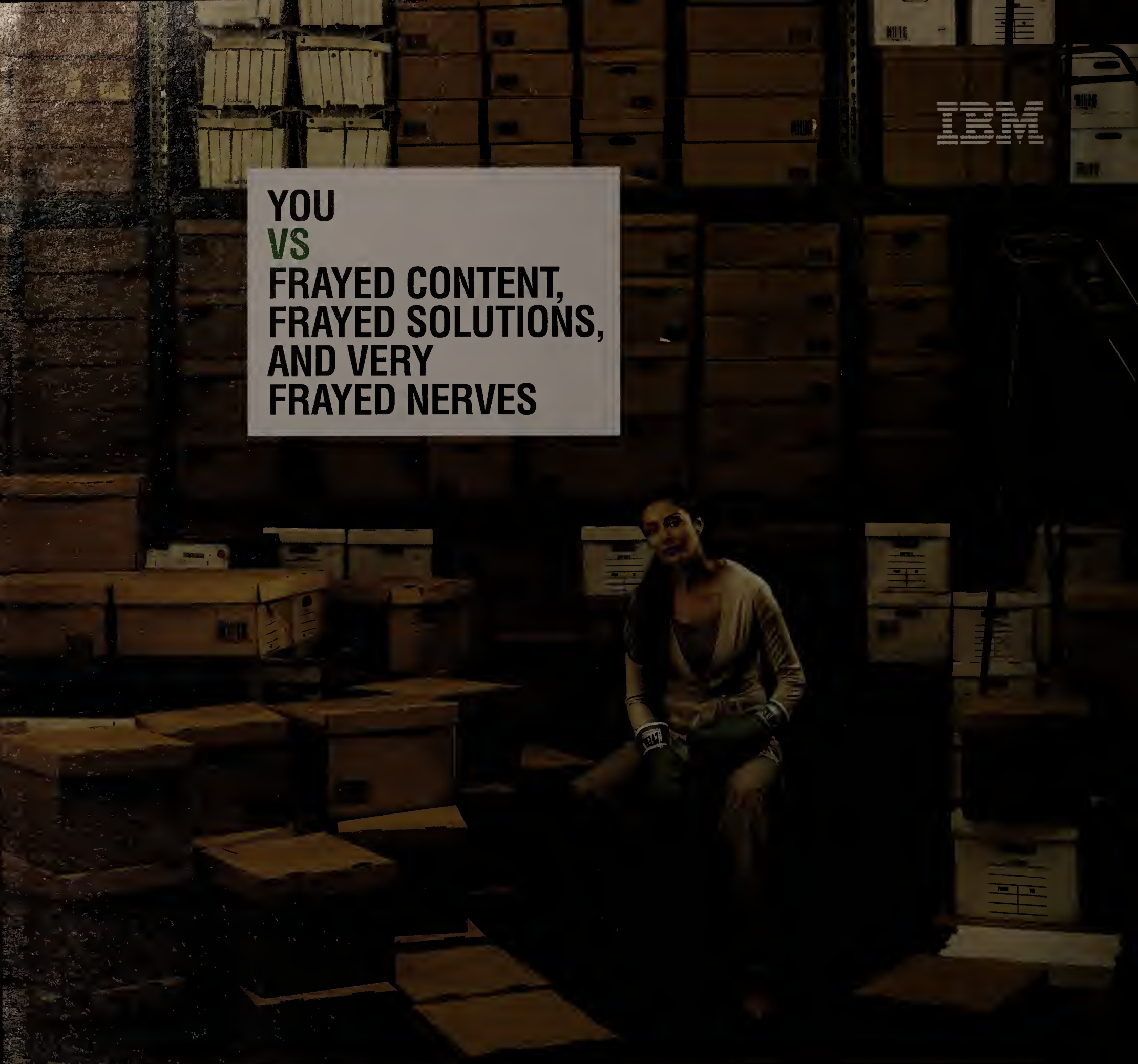

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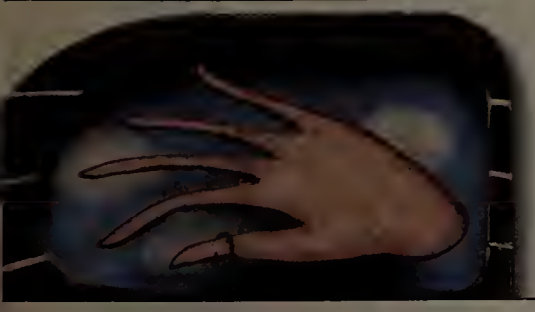

Raise the Bar

In the Management section: Good vendor relationships — and superior service — don't happen by accident. Here's how our Premier 100 IT leaders get vendors to notch up their performance. **Page 42**

Pick Your Battles

In the Technology section: Vulnerability management allows users to prioritize threats and assets by creating a security plan that goes beyond emergency response. **Page 21**

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5 **The SEC issues** new Sarbanes-Oxley guidelines that reduce the number of IT controls companies must assess.

5 **Pfizer intends** to consolidate more than 30 document management systems and standardize on XML to meet federal regulations.

8 **IBM plans** to release a database for configuration management, but other vendors claim it's not the first to take a federated approach.

8 **Cybersecurity standards** proposed for the utility industry are flawed, say conference attendees.

10 **SAP announces** that 10 technology providers have licensed its its ESA middleware.

10 **Bank insiders** were involved in a massive theft of account data over four years, New Jersey police allege.

12 **Global Dispatches:** Fujitsu plans to offer its palm-reading biometric system outside Japan; and Sabre agrees to buy a U.K. online travel agency.

14 **EMC will ship** its storage virtualization technology late, but users are willing to wait.

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39 **Grooming the Next Generation.** The impending exodus of baby boomers and the dearth of computer science graduates appear more troublesome now that the economy is picking up and IT staffers are starting to look around for greener pastures. If there was ever a time to get serious about succession planning, it's now.

48 **Career Watch.** FedEx's Sherry Aaholm answers readers' questions about jobs and careers. Also, we look at ways to hang on to your company's "deep smarts," top workforce-building challenges and the good and bad news about CIOs.

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16 **Virginia Robbins** loves that feeling when everything finally comes together and a project is successful on all fronts.

17 **David Moschella** thinks a new platform is emerging at the very front of the corporation. Will IT play a role?

36 **Jian Zhen** helps IT managers weigh the costs and benefits of buying software versus appliances.

50 **Paul M. Ingevaldson**, retired Ace Hardware CIO, makes the case for the CIO to report directly to the CEO. Pass it along.

56 **Frankly Speaking: Frank Hayes** laments what the Sarbanes-Oxley Act is doing to trust within businesses, but he sees a ray of hope in new SEC guidelines.

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Sober-ing Reminder

SECURITY: The release of two variants of the Sober worm prompts columnist Douglas Schweitzer to reiterate the importance of training employees to practice safe computing. **QuickLink 54239**

Where Have All the Experts Gone?

DEVELOPMENT: Offshoring and layoffs may look good for the bottom line at first, columnist Linda Hayes says, but the loss of in-house experience can come back to haunt you. **QuickLink 54208**

Managing Global CRM

PRIVACY: Rolling out CRM internationally? Columnist Jay Cline says you'll need to consider the differing needs of the world's privacy "fundamentalists" and "pragmatists." **QuickLink 54420**

Is There Really a Glass Ceiling for CIOs?

CAREERS: By taking steps to become more confident and action-focused, CIOs can become successful CEOs, says Korn/Ferry's Simon Wiggins. **QuickLink 54265**

Health Care Hurdles

STORAGE WEBCAST: John D. Halamka, CIO at both CareGroup Health System and Harvard Medical School, oversees the IT infrastructure for 3,000 doctors who move 70TB of data a day. He discusses how he keeps his users happy in this free on-demand webcast. **QuickLink a5870**

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BRIEFS

Texas County Sues SAP and Siemens

Collin County, Texas, filed a lawsuit against units of SAP AG and Siemens AG, charging fraud, breach of contract and negligent misrepresentation. The county is seeking almost $16 million in damages. The suit was filed after the companies failed to complete work on an ERP system slated to be finished in October. SAP and Siemens have filed motions to dismiss the lawsuit.

Waitt Resigns as Gateway Chairman

Gateway Inc. founder and Chairman Ted Waitt has resigned from the PC company, passing his baton to longtime board member Richard Snyder. Waitt, Gateway's chairman for 20 years, said he is leaving to concentrate on his other businesses and to do philanthropic work. Snyder has been a director at the Irvine, Calif.-based company since 1991 and was president and chief operating officer in the mid-1990s.

Broadcom Brings Suit on Qualcomm

Communications chip vendor Broadcom Corp. has sued Qualcomm Inc., seeking to halt the manufacture and sale of key Qualcomm chips. Two suits, filed in the U.S. District Court in California, allege that Qualcomm has infringed a total of 10 Broadcom patents. Broadcom has also filed a complaint with the International Trade Commission.

Google Updates Desktop Search

Google Inc. has released a desktop search tool tailored for the workplace. The new tool, called Google Desktop Search for the Enterprise, has a series of installation, distribution, management and security features for IT departments to use when rolling out and configuring the product.

Single Sign-on Strategy Faces User Scrutiny

Microsoft, Sun to propose technical specs as a standard

BY PATRICK THIBODEAU

THE SINGLE sign-on specifications that Microsoft Corp. and Sun Microsystems Inc. announced this month won't help John Wade, CIO at Saint Luke's Health System, a 10-hospital health care group in Kansas City, Mo.

That's partly because most of the systems at Saint Luke's are from Hewlett-Packard Co. But Wade said he just can't wait for IT vendors to solve the single sign-on problem. His end users see the lack of that capability as their major systems headache, he said.

As a result, Wade expects to spend $100,000 to $500,000 of his $23 million IT budget to add single sign-on functionality by early next year. The effort could involve the creation of custom interfaces.

"I don't think any of the vendors have a real simplified directory management process," he said. "It's an industry-wide problem."

Sun and Microsoft agreed to two sets of specifications allowing single sign-on for users of systems running Solaris and Windows [QuickLink 54419]. The announcement came at the one-year anniversary of an agreement by the two companies to settle a long-running legal dispute and cooperate on integrating their products.

Microsoft and Sun have released draft specifications. They will be submitted to an as-yet-unnamed standards body and will face scrutiny from rival vendors as well as users. Even Microsoft and Sun users won't see products with capabilities built around the proposed single sign-on specifications until next year.

The access-control and single sign-on products now on the market have largely been developed to work in single operating environments, said Lynn Goodendorf, vice president of information privacy protection at Windsor, England-based InterContinental Hotels Group PLC, which operates 3,500 hotels worldwide.

"The goal of most users is we want to have one solution that would work in all our different environments and operating systems, and not have multiple tools to do that," Goodendorf said. She noted that InterContinental has a single sign-on system for its Web-based applications but not for its mainframes.

Goodendorf said the Sun-Microsoft agreement was "a positive development for privacy" because single sign-on is closely coupled with improved data access controls.

But it's unclear whether the specifications will be supported as standards by other vendors. For example, the Liberty Alliance, which includes Sun and is one of the major vendor groups working on identity management issues, characterized the Microsoft-Sun specifications as a step, not a solution.

Not 'Truly' Interoperable

Sai Allavarpu, director of product management and marketing at HP, said Sun and Microsoft have no plan for involving users or other vendors in finalizing the specifications.

"So it doesn't appear to be a truly interoperable solution," he said. "It just appears to be interoperability between two implementations."

But Sun and Microsoft said that the standards-approval process will involve other vendors. And they argued that the specifications are applicable for any system that uses either the Liberty Alliance's protocols or the Web Services Federation specification, which was developed by Microsoft and vendors such as IBM and BEA Systems Inc.

IT managers have said that they welcome the prospect of single sign-on and that it could help reduce costs, but that there are risks as well.

"As nice as it is to think that one username and password will gain you access to all of your systems, it also means that the employees need to be overly protective of their log-in codes," said Brian Young, vice president of IT at Creighton University in Omaha. "Single sign-on gives everyone a master key to their house."

54543

ID Management Ties Are GM's Top Priority

GENERAL MOTORS CORP. has played a key role in getting Sun and Microsoft to cooperate on cross-platform identity management. **Fred Killeen**, director of systems development and chief technology officer for GM's information systems and services organization, said in an interview last week that single sign-on capability is the automaker's top priority for the two vendors.

To what degree have your users been frustrated by the lack of interoperability between Microsoft and Sun products? Clearly, as users, we would like to have our life simplified – we would like to have fewer IDs and fewer passwords. From a GM perspective, we really view it as a security component as well, because the more IDs and passwords you have, users tend to write them down, and they tend to put them in places which actually make you less secure than more secure.

In terms of identity management, what impact will the capabilities that Microsoft and Sun are promising have on your costs? I don't think we know enough yet. Certainly, there are lots of estimates on percentages of calls to your help desk for password resets. This isn't going to make all of them go away, because you still have lots of other applications out there. But it can certainly reduce them.

We [also] believe it can help reduce some of the access management requirements. It would integrate the identities there.

If we were going to integrate as is, because we're in an outsourced environment, we would pay a supplier to develop these interfaces, maintain them over time and refresh them every time these suppliers upgrade their products.

Sun and Microsoft also want to improve their management capabilities and make it easier to write applications that run in both environments. What do you want to see the companies accomplish next? I think they're not done with identity management. We need to continue to drive this [and] look at the integration issues and how you pull these two environments together.

Down the road, the other technologies that they have talked about are great opportunities. But at least for right now, this is the one that we highlighted, and we want to make sure that we drive this one to closure.

– Patrick Thibodeau

READ MORE ONLINE

Go to our Web site for an extended version of this interview:

QuickLink 54506
www.computerworld.com

SEC Offers Limited Sarb-Ox Relief to IT

Feedback leads to modifications in assessing controls

BY THOMAS HOFFMAN

The U.S. Securities and Exchange Commission last week issued new Sarbanes-Oxley Act compliance guidelines that should provide IT departments at publicly held companies with some relief by reducing the number of IT controls that must be assessed each year.

However, the SEC will continue to require that companies assess the controls that are in place for any new systems or software upgrades — particularly those that affect financial reporting — despite feedback from auditors and IT that such rules can be stifling.

For instance, the SEC denied requests that it exclude new systems and upgrades installed late in a fiscal year from year-end testing requirements. According to the guidelines, "management can plan, design and perform preliminary assessments of internal controls in advance of system implementations or upgrades."

That means companies must conduct risk assessments on the systems during the planning stages "and focus on the high-risk areas," said Carter Priess, CEO of Pace Solutions Inc., an IT audit consultancy in Danvers, Ill.

The SEC guidelines are aimed at allowing auditors to reduce the number of checks they conduct on internal controls under Section 404 of the law. Some analysts say the changes suggest that the original requirements may indeed have been excessive.

Implications Unclear

Todd Naughton, vice president and controller at Zebra Technologies Corp., a high-tech printing vendor in Vernon Hills, Ill., said he will need a few weeks to review the SEC's guidance with IT and external auditors to determine its implications.

Still, Naughton said he's "guardedly optimistic" that the SEC's latest guidance "will offer relief to our IT staff."

In the statement last week, the SEC said that it will no longer require an assessment of all IT controls, only those that affect the financial reporting of an organization.

SEC Statement

> **"The staff does not believe it necessary for purposes of Section 404 for management to assess all general IT controls, and especially not those that primarily pertain to the efficiency or effectiveness of the operations of the organization but are not relevant to financial reporting.**
>
> *— From the SEC's "Staff Statement on Management's Report on Internal Control Over Financial Reporting"*

Many IT managers had previously complained about the lack of clarity in terms of the IT controls that had to be assessed, said John Hagerty, an analyst at Boston-based AMR Research Inc.

By narrowing the scope of the IT controls that need to be annually reviewed, the SEC guidance "should lower the burden on IT," Priess said.

The SEC's new recommendation that IT departments conduct risk assessments on general IT controls such as those around information security may have introduced a new "level of ambiguity," said Sanjay Anand, chairman of the Sarbanes-Oxley Group of Auditors and Professionals, an online community of Sarbanes-Oxley practitioners based in Clifton, N.J.

"The approach has shifted from 'test all controls' to 'a risk-based approach to choosing which controls to review,' " said Anand.

All in all, said Hagerty, the result will depend heavily on how auditors interpret the guidelines. **54533**

MORE ON SARB-OX

Columnist Frank Hayes gives his take on the guidelines. **Page 56**

Rules Prompt Pfizer to Consolidate Content Management Systems

Project to convert Word documents to XML also on tap

BY HEATHER HAVENSTEIN

Pfizer Inc. is embarking on an effort to consolidate more than 30 document management systems in order to streamline regulatory submissions.

At the same time, the New York-based drug giant has started an effort to standardize on XML for authoring to meet new federal regulations.

The projects stem from the challenges associated with meeting new submission requirements from the U.S. Food and Drug Administration and other agencies, said Christopher Lee, director of worldwide regulatory operations at Pfizer.

A consolidated content management system will allow the company to meet these evolving submission requirements without having to deploy tactical point solutions or revise content multiple times, Lee said.

Pfizer plans to build the content repository by using technology from the Documentum Inc. unit of Hopkinton, Mass.-based EMC Corp.

The content management system consolidation will span operations in 26 countries and different corporate groups such as research and marketing to create one seamless flow of information to support regulatory submissions, according to Lee.

The company is also defining "authoritative sources" of content so information about a single subject — such as a drug compound — can be limited to one location.

Consolidating content management systems will likely allow Pfizer to more easily integrate content needed for regulatory submissions that may now be created on disparate systems, said Nathaniel Palmer, an analyst at Delphi Group in Boston.

"It will be a huge effort . . . if they're able to do it successfully, the advantages would be tremendous around the life cycle of information and being able to trace back to the origins of that information," Palmer said.

At the same time, Pfizer plans to convert all of its regulatory submission-related content from Word to XML.

Beginning in October, the FDA will require that pharmaceutical companies submit changes to product labeling in an XML format. Most pharmaceutical companies, including Pfizer, now deliver these changes in Word documents.

Pfizer will decide in the next 30 days whether to use an outside vendor to convert existing documents to XML or build in-house tools to do the job.

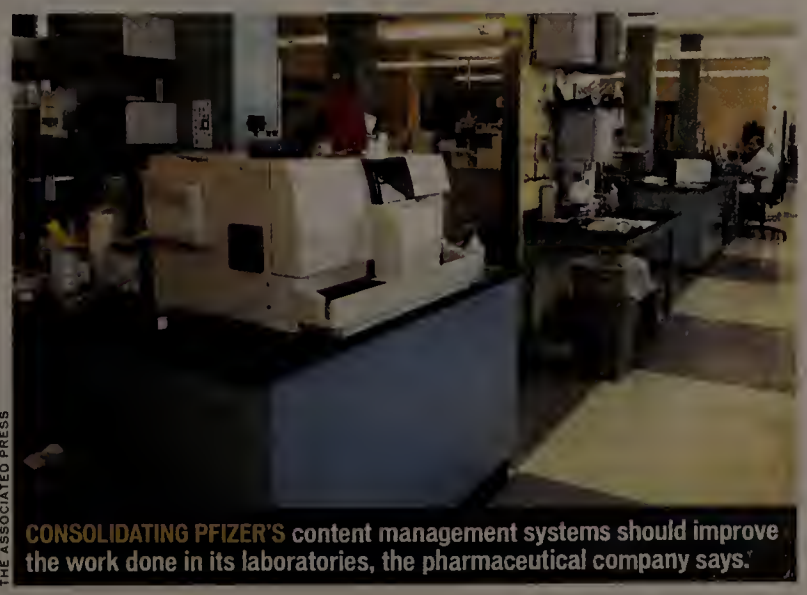
The company plans to create documents directly in XML by using tools from Arbortext Inc. in Ann Arbor, Mich., Lee said.

In parallel, the company is building a common template that can help in the process of converting Word documents to XML.

"From a business standpoint, Word right now introduces the opportunity for variability," which hinders efforts to standardize company documents, Lee said.

In addition, an XML-based authoring system will allow the people writing the content — often physicians — to focus solely on content without having to worry about structure of the document, he said.

However, Palmer noted that there will be cultural challenges associated with migrating authoring to XML. "You have fiefdoms . . . that aren't going to easily change," he said. **54532**



THE ASSOCIATED PRESS

CONSOLIDATING PFIZER'S content management systems should improve the work done in its laboratories, the pharmaceutical company says.

MORE ONLINE

Attendees at the AIIM show say they're looking for ways to better manage content and make it easier for users to access.

QuickLink a5880
www.computerworld.com

BRIEFS

Brocade to Restate 2001-04 Results

Data storage equipment maker Brocade Communications Systems Inc. said that it overstated its earnings by as much as $52 million from 2001 through 2004 because of improper accounting of its stock-option expenses. San Jose-based Brocade also disclosed that it is cooperating with a joint investigation of its stock-option practice by the U.S. Department of Justice and the Securities and Exchange Commission.

HP Results Beat Expectations

Led by strong revenue growth outside of the U.S., Hewlett-Packard Co. reported that its second-quarter revenue grew 7% from the year-earlier period, slightly ahead of Wall Street's expectations.

HP BY THE NUMBERS

	REVENUE	PROFIT
Q2 '05	$21.57B	$966M
Q2 '04	$20.11B	$884M

PalmOne Names Colligan CEO

Handheld device maker PalmOne Inc. has named Ed Colligan president and CEO. He had been serving as interim CEO since former head Todd Bradley left in February. Colligan has been charged with regaining PalmOne's dwindling share of an overall declining handheld market from companies such as HP.

Microsoft Adds Hosting Tools

Microsoft Corp. has unveiled new tools to help hosting service providers integrate Windows-based applications into their sites and improve site management. The Windows-based Hosting Version 3.5 is aimed at providers that offer shared Web hosting or discount dedicated server hosting. The tool includes support for Microsoft Operations Manager.

ON THE MARK

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

MATTHEW FAULKNER

Offshore Wage Gains Won't Raise . . .

. . . the cost of IT work heading to India. So claims Marc Hebert, executive vice president of marketing at Sierra Atlantic Inc., an offshore outsourcer in Fremont, Calif. Despite annual wage increases of 15% to 20% for IT staffers in India, the cost of technology operations there won't edge upward, Hebert argues. He says that those pay increases are being compensated for by better productivity from India-based IT workers, with the subcontinent's improved technology infrastructure contributing to the productivity boost. Hebert adds that India's universities today produce four engineers for every one graduating from a U.S. school — a ratio that he predicts will reach 10-1 by 2015. The prevalence of graduates in India means that Sierra Atlantic can hire well-trained entry-level programmers and IT administrators, which helps keep its costs down, Hebert says. To keep up with demand, Sierra Atlantic added 400 jobs last year, increasing its total workforce to about 900 employees. About 50 of those new jobs were in the U.S. Hebert claims that during the last presidential election, the opposition to offshoring voiced by many Democrats backfired and gave the practice some "good PR." Similarly, he suggests that television commentator Lou Dobbs, who regularly criticizes offshoring on his show, "does more to help the industry than anybody." The offshore phenomenon is spreading, Hebert says, noting that some companies in Canada — which itself is considered a "nearshore" alternative for U.S. businesses — have begun moving IT jobs to India through Sierra Atlantic.

HEBERT: India's productivity trumps rising wages.

Trust your PC to protect your . . .

. . . network. No, not Windows, but the PC hardware itself. In March, Dell Inc. became the last of the major PC makers to begin shipping systems with Trusted Platform Module (TPM) security devices, which are based on specifications developed by Trusted Computing Group Inc. in Portland, Ore. Steven Sprague, CEO of IT security vendor Wave Systems Corp. in Lee, Mass., says that in four or five years, as companies replace their older PCs, all corporate desktops and laptops should be TPM-ready. TPM chips can be used to encrypt e-mail messages and data on hard drives. Most important, says Sprague, the technology can authenticate users before letting them on corporate networks, making it more difficult for unauthorized people to access systems. He adds that once all your PCs are TPM-enabled, it may be possible to ditch your single sign-on plans because you'll be able to use the initial authentication to give end users access to all their applications. Sprague says the TPM specification for mobile devices will be ready by the end of the year. Goodness. What will we do when computing becomes secure?

SPRAGUE: Secure computing is near.

A lot cheaper and more secure . . .

. . . than PCs. That's what all thin-client advocates boast about their devices. Yet, according to market research company IDC, thin clients make up a minuscule 1% to 2% of the overall desktop market. That doesn't dampen the enthusiasm of Michael Kantrowitz, CEO of Neoware Systems Inc. in King of Prussia, Pa. After all, *Fortune* magazine just dubbed Neoware the eighth-fastest-growing company in the U.S., and IDC ranks it as the No. 2 thin-client vendor behind Wyse Technology Inc. Kantrowitz thinks his company is on a trajectory to pass San Jose-based Wyse, although he wouldn't say when. Furthermore, he predicts that by 2010, as much as 10% of desktop systems will be thin clients, due to a combination of cost issues and security concerns that TPM technology may or may not resolve. Kantrowitz estimates that up to 90% of corporate desktops could be replaced by thin clients, but he acknowledges that it won't happen. "PCs are entrenched in IT departments and will continue to be entrenched," he says.

KANTROWITZ: Thin clients are growing.

CEOs, even CIOs, just don't see . . .

. . . good vendor support. That's the response from J.B. Wood, president of the Service & Support Professionals Association in San Diego, to a recent item here about IT execs taking aim at pricey technical support deals [QuickLink 53633]. "As you move up the IS chain, user-support satisfaction levels go down, and the perceived value of the [service and support] contract goes down," Wood observes. Ironically, a vendor's support gets management kudos only when the technology is flaky, he says. "The invisibility of good support helps systems stay up, drives TCO down and unlocks business benefits that users might not otherwise see," Wood claims. His advice: When you're renegotiating your service and support contracts, take more than those annual fees into account. **54489**

WOOD: Execs can't see service and support value.

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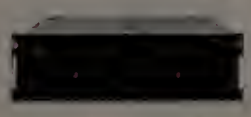

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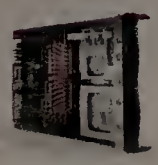

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IBM Adds New Choice On Configuration DBs

Claims to offer first truly federated repository for IT info; others disagree

BY MATT HAMBLEN

When IBM last week detailed plans to release a database for consolidating information about system configurations and other IT settings, it claimed to be the first management tools vendor to announce "a truly federated approach" for pulling together such data.

But that claim unleashed a torrent of reactions from competitors that said they already offer what IBM plans to roll out later this year. And two technology analysts said IBM's Tivoli unit is playing catch-up to other vendors on the configuration management database (CMDB) concept.

Tivoli's upcoming Change and Configuration Management Database software and other products like it aim to give IT managers a central repository of data about their technology installations. The use of a single management database is recommended as part of the IT Infrastructure Library (ITIL), a set of IT management guidelines.

Wayne Fowler, director of server and systems management at BMO Financial Group, said the Toronto-based banking firm is devoted to ITIL practices. "We're a pure-play ITIL shop, and we take a religious approach to it," he said.

But he added that BMO plans to use six to 12 management databases from different vendors to help administer the more than 2 million components of its global network. IBM's forthcoming offering will be part of that mix.

BMO has been a Tivoli customer for six years. But it also uses BMC Software Inc.'s IT service desk management tools and Peregrine Systems Inc.'s asset management software, Fowler noted. "The approach you want to ask from any vendor is, 'How do you fit in a federated environment, or would you rather try to rule the world?' " he said.

Lender's Service Inc., which provides property valuation, title and closing services to lending companies, doesn't use a federated database yet. But Marc Machin, a senior systems engineer at LSI's Santa Ana, Calif., office, said it would be desirable to have one so he could have "one entry point to look at everything." He added that he needs to research how well the available databases integrate with other tools.

BMC today will announce plans to combine its Patrol and Patrol Express software to create a product called Performance Manager that's designed to offer users both agent-based and agentless management tools.

The two Patrol products will be bundled under a single license next month, and BMC plans to integrate them with its CMDB next year, said Tom Bishop, who was named chief technology officer at the Houston-based company last week. BMC announced its CMDB in January and has shipped the database to 65 customers, according to Bishop.

Hewlett-Packard Co., Computer Associates International Inc. and other vendors said they also have federated databases for consolidating IT information. For example, HP has offered a CMDB with its OpenView Service Desk software since 1999, said Bill Emmett, chief solutions officer for HP's software unit.

IBM plans to ship a limited release of the Tivoli database this summer. Mary Johnston-Turner, an analyst at Summit Strategies Inc. in Boston, said the upcoming database is "extremely important . . . because IBM has been behind on addressing ITIL." **54516**

More Tools

IBM also announced the following Tivoli products:

- **Unified Process, an ITIL-based navigation tool that provides information for mapping and modifying IT processes.**
- **Process Managers, a set of packaged software that automates change, availability and information life-cycle management processes.**
- **Upgraded provisioning and configuration management tools that track data center resources and install security patches.**

SYSTEM MANAGERS

IBM plans two upgrades of the management software it bundles with its servers:

QuickLink 54450
www.computerworld.com

Utility Cybersecurity Plan Questioned

BY THOMAS HOFFMAN
CHICAGO

A set of cybersecurity standards proposed by the North American Electric Reliability Council (NERC) are too detailed in some instances, attendees at an industry conference here said last week.

Users at the Platts Cyber Security for Utilities conference said that if the proposal is adopted, it could lead to regional differences in interpretation and extra compliance work for information security managers at electric utilities.

NERC's proposed cybersecurity standards, known as CIP-002 through CIP-009, cover areas ranging from the security of critical cyberassets to personnel screening and training requirements.

Charles Noble, a member of the NERC drafting committee who is also the information security coordinator at ISO New England in Holyoke, Mass., said the biggest weakness of the proposal is that it's too prescriptive in certain areas, like records management, where it spells out the number of years that specific types of records must be maintained.

A key strength of the proposal is that it's being driven by utilities and not by the federal government, said James Sample, manager of information security services at California Independent System Operator Corp. in Folsom. With utility-driven standards, "we can control our own destiny," Sample said.

Enforceability Unclear

NERC's membership includes utilities and related organizations. Its mission is to ensure the reliability of bulk power generation in North America. As a volunteer organization, its standards aren't currently enforceable.

However, the energy bill that's currently being debated by the U.S. Senate includes a proposal to grant NERC regulatory authority. And even if NERC's proposed standards aren't eventually approved by its members, it's widely believed that the Federal Energy Regulatory Commission (FERC) or state regulatory authorities would step in to create and enforce more-rigid cybersecurity requirements.

If the standards aren't passed by two-thirds of NERC's members as required, "I wouldn't be surprised if FERC doesn't jump on it, make it a federal regulation and toughen up some of the language," said Scott McCoy, director of security at Minneapolis-based Xcel Energy Inc.

To date, NERC members have voted on two drafts of the proposed standards. Earlier this month, the council posted the third draft, which members will be able to comment on for a 45-day period. In late July, the NERC drafting committee will post a final draft for a 30-day review before the next round of voting, said Larry Bugh, chairman of the NERC standard drafting team and manager of IT for the East Central Area Reliability Council, one of 10 regional NERC units.

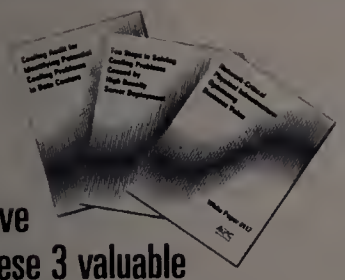
> **"The biggest challenge we face is the corporate culture."**
>
> **JAMES SAMPLE**, MANAGER OF INFORMATION SECURITY SERVICES, CALIFORNIA ISO

One of the concerns that industry security managers have is that the current standard, known as UA 1200, is set to expire in early August, thus leaving a gap between cybersecurity standards.

Barry Lawson, manager of power delivery at the National Rural Electric Cooperative Association, said he believes most utilities will continue to abide by the current standard until another one is approved.

Thomas Kropp, a project manager at the Electric Power Research Institute in Palo Alto, Calif., noted that other cybersecurity standards being developed by organizations such as the National Institute of Standards and Technology and the Institute of Electrical and Electronics Engineers Inc. may end up imposing conflicting demands upon utilities.

If and when NERC cybersecurity standards are published and regardless of how their content may change, utilities will still face compliance challenges. "The biggest challenge we face is the corporate culture" in terms of getting plant operators and other workers to change their mind-sets about security, said Sample. **54536**



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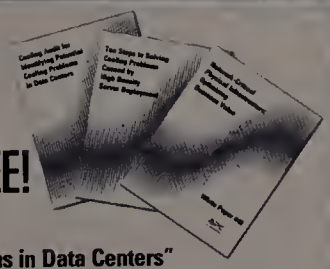

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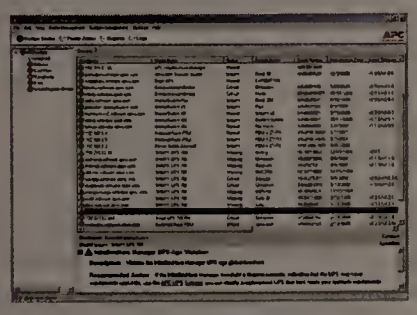

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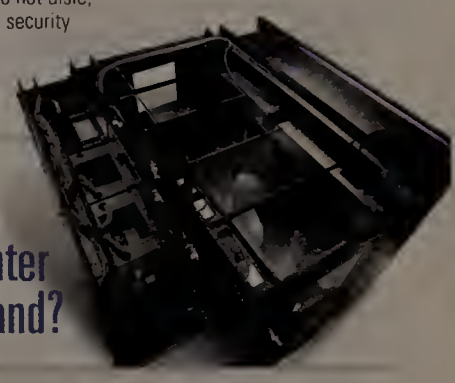

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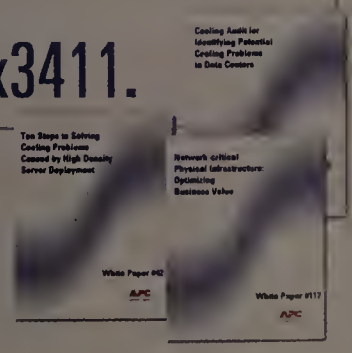

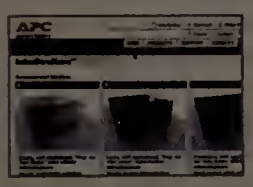

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BRIEFS

Nortel, IBM to Build Network Gear

Nortel Networks Corp. and IBM have agreed to jointly develop networking products for the telecommunications industry. They will initially focus on developing carrier-grade servers for communications providers. Those products will be based on IBM's BladeCenter server design. The companies have created a 30-person joint development center in Research Triangle Park, N.C.

CEO Otellini Begins New Era at Intel

Paul Otellini has become the fifth CEO in Intel Corp.'s 37-year history – and he's the first person without an engineering background to rise to the top spot there. Otellini replaces Craig Barrett, Intel's CEO since 1998, who will become chairman. Andy Grove, the current chairman, will step down from the board but continue to advise Intel's leaders.

BT Group Posts Sales, Profit Gains

BT Group PLC credited its "new wave" offerings – information and communications technology, as well as broadband and mobility services – for increases in revenue and profit in its fourth fiscal quarter, which ended March 31.

BT GROUP BY THE NUMBERS

	REVENUE	PROFIT
Q4 '05	$9.15B	$799M
Q4 '04	$8.79B	$556M

Fujitsu Shipping High-End Sparc CPU

Fujitsu Computer Systems Corp. is shipping a faster version of its Sparc64 V processor with certain PrimePower Unix servers. The company said five PrimePower models will ship with a 2.08-GHz Sparc64 V CPU with 4MB of on-chip cache. Fujitsu wouldn't say whether it plans to ship the new chips with its low-end PrimePower 250 and 450 systems.

Ten Tech Firms License SAP's ESA Middleware

CEO also hints at pricing moves at the Sapphire event

BY MARC L. SONGINI
BOSTON

SAP AG last week said that 10 technology companies, including Microsoft Corp., Cisco Systems Inc. and Computer Associates International Inc., have licensed its Enterprise Services Architecture (ESA) as it continues to extend its service-oriented architecture platform.

At its Sapphire 2005 user event here, the ERP and business applications vendor touted the Web-based ESA and its centerpiece NetWeaver middleware technology, which can be used to integrate SAP's mySAP suite with homegrown and third-party applications.

In addition, Henning Kagermann, chairman and CEO of SAP, hinted that as the ESA stack evolves, SAP might change its current, traditional licensing policy to what he called "value-based pricing."

User Interest

Users at the conference said they are closely watching the evolution of ESA.

The NetWeaver stack is "absolutely part of our business strategy," said Ed Deenihan, vice president of global services at Network Appliance Inc., a storage systems and services provider and an SAP partner.

Deenihan said his company is looking to integrate its remote and on-site support offerings. By using NetWeaver, he said, "we don't think we have to rip out what we've already done. The key is we can evolve at the pace that a customer wants."

Edward Pisula Jr., director of corporate IT at Respironics Inc., a Murrysville, Pa.-based maker of respiratory devices, said the NetWeaver platform can be used to tweak his company's software for competitive advantage.

Respironics now runs SAP's R/3 ERP and Business Warehouse business intelligence applications. Pisula said NetWeaver could make SAP's proprietary ABAP programming language easier to use by crafting simple user interfaces that provide users with pertinent data via a portal.

As for value-based pricing, Pisula said the jury is still out. "I'm willing to listen," he said.

Ralph Loura, vice president and CIO at Holtsville, N.Y.-based wireless products provider Symbol Technologies Inc., said that although value-based pricing is an interesting concept, he would need more details before making a decision about it.

NetWeaver has the potential to provide something that software vendors have been promising for 10 years in terms of creating complete workflows, but there are significant technical problems, said David Dobrin, an analyst at consultancy B2B Analysts Inc. in Boston. "You have to make sure the puzzle pieces fit together right," he said. "You can't just take a few pieces here and there and expect to make it all work."

Meanwhile, SAP also announced mySAP CRM 2005 at the user conference.

The new system includes enhanced marketing capabilities, including an e-mail response management tool, and service management improvements to let users automate the handling of warranties, returns and other processes.

The CRM application is slated to ship in October. 54537

N.J. Police Charge Nine for Stealing Bank Account Data

Thefts allegedly involved bank workers, took place over a four-year period

BY TODD R. WEISS

Hundreds of thousands of electronic account records were allegedly stolen from four banks and sold to collection agencies and law firms by a New Jersey data-theft ring that included seven bank employees, according to police in the city of Hackensack.

The Hackensack Police Department last week increased the total number of customer accounts that allegedly were breached to about 676,000. That's up from the initial count of 500,000 records.

"This thing's getting bigger and bigger," Hackensack Police Capt. Frank Lomia said. "It's still growing. The banks are uncovering more accounts than we knew about."

The case has so far led to criminal charges against nine people, and the Hackensack police are continuing their investigation into the alleged thefts by the group, which is believed to have operated for more than four years. The U.S. Department of the Treasury and the Internal Revenue Service also are involved in the investigation, police said.

Insiders Suspected

The police department announced the arrests of the nine suspects on April 28. They were charged with illegally selling personal information stolen from bank and New Jersey state computer databases. The suspects captured screen images of some records and printed out others, police said.

Police allege that a 35-year-old Hackensack resident set up an unlicensed company as a collection agency and a business for locating individuals who had defaulted on payments. He allegedly paid the bank employees to provide him with data about customers, including their names, account numbers and balances.

The employees worked for Wachovia Corp., Bank of America Corp., Commerce Bancorp Inc. and PNC Bank NA, according to the allegations. None were IT staffers.

> "This thing's getting bigger and bigger. . . . The banks are uncovering more accounts than we knew about."
>
> CAPT. FRANK LOMIA, HACKENSACK POLICE DEPARTMENT

Fran Durst, a spokeswoman for Wachovia, said the Hackensack police have released the names of 300,000 people whose information may have been stolen. Wachovia is notifying about 14,000 of its customers whose names were on the list, she said.

Bank of America hasn't revealed the number of its customers who may have been affected by the data thefts. Spokeswoman Alexandra Liftman would say only that the bank has communicated with about 75 customers whose records are known to have been accessed.

A spokesman for PNC Bank said it has identified only 12 customers who might be affected. Officials at Commerce Bank couldn't be reached for comment last week. 54542

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GLOBAL DISPATCHES

An International IT News Digest

Fujitsu Expands Market For Biometric System

TOKYO

FUJITSU LTD. last week announced that it will begin selling its palm-vein biometric security system outside Japan by the end of this year.

The system, which uses the pattern of veins inside a person's hand to verify his identity, has been available in Japan since mid-2004 and is already being used in some high-profile applications.

For example, The Bank of Tokyo-Mitsubishi Ltd., Japan's third-largest retail bank, began rolling out the technology last October in its 267 branches as an alternative to personal identification numbers for ATM transactions. About half of the bank's 3,000 ATMs will have the system by September.

The product being offered by Tokyo-based Fujitsu includes a scanner that is similar to a digital camera but works in the near-infrared range, so it can detect veins. The system then uses a proprietary algorithm to match the images produced by the scanner to a database for verification, taking into account the number of veins, their position and the points at which they cross.

■ MARTYN WILLIAMS, IDG NEWS SERVICE

Sabre to Pay $1B for U.K.'s Lastminute.com

LONDON

SABRE HOLDINGS CORP., the operator of Travelocity.com LP, announced May 12 that it plans to create Europe's largest online travel agency by acquiring London-based Lastminute.com PLC for £577 million ($1.08 billion U.S.).

Technically, the acquisition will be made by Travelocity Europe Ltd., an indirect subsidiary that Southlake, Texas-based Sabre established for the purpose of executing the deal.

Sabre, which expects to close the acquisition by the end of July, said that the combined Travelocity and Lastminute.com business will have strong positions in the U.K., France, Germany, Italy, Scandinavia and Spain.

■ LAURA ROHDE, IDG NEWS SERVICE

GLOBAL FACT

34M

Expected number of broadband Internet subscribers in China by year's end.

SOURCE: ISUPPLI CORP., EL SEGUNDO, CALIF.

Asian Telecom Carrier Taps Java for Operations

TOKYO

SUN MICROSYSTEMS INC. last week announced that it will supply software and servers to KT Corp., South Korea's dominant telecommunications carrier, under a deal that Sun says advances the use of Java in that industry's back-end systems.

Seoul-based KT, formerly known as Korea Telecom, will use Java application programming interfaces (API), J2EE middleware and servers running Solaris to tie together the network management, provisioning and billing systems that support its nationwide broadband network.

Sun and KT will jointly develop the operational support system, or OSS, as it's known among telecom carriers. The deal is part of Sun's "OSS through Java" initiative, which uses Java APIs to integrate components of operational and business support systems in the telecommunications sector. That industry is Sun's biggest vertical market globally. **54501**

■ MARTYN WILLIAMS, IDG NEWS SERVICE

Compiled by Mitch Betts.

Briefly Noted

Cuba's daily newspaper reported last week that the government will gradually switch from Windows to the Linux operating system on all PCs, according to the Agence France Press news service. Roberto del Puerto, director of the country's IT office, told the government daily that Cuba already has about 1,500 Linux computers in place.

Xenos Group Inc., based near Toronto, announced last week that BCEE (Banque et Caisse d'Epargne de l'Etat du Luxembourg), the largest bank in Luxembourg, plans to install its d2e document management software. The Xenos software will be integrated with a content management system from EMC Corp.'s Documentum unit.

Two global outsourcing advisory firms based on different sides of the Atlantic merged last week. Trowbridge Group in Addison, Texas, and London-based ALS Consulting Ltd. said they have combined to form Alsbridge Ltd., which will have offices in both locations.

Continued from page 1

EMC

Symmetrix was three or four years ago," said John Hegner, vice president of technology services at Liberty Medical Supply Inc. in Port St. Lucie, Fla. "Except for the highest feature functionality, I don't see a place for Symmetrix."

Hegner manages more than 50TB of data stored in Clariion arrays. Liberty Medical doesn't use any Symmetrix systems, he said.

Michael Berthiaume, a systems analyst at American Power Conversion Corp. in West Kingston, R.I., said his company recently replaced two older Symmetrix 8530 arrays with one high-end DMX and one Clariion CX700 array, achieving a "significant" return on investment.

The Clariion array, which can use either higher-end Fibre Channel disk drives or lower-cost Advanced Technology Attachment disks, is used by Berthiaume's shop for applications such as Lotus Notes and software from Oracle Corp. and Siebel Systems Inc. The DMX array is used almost exclusively for CRM applications, he said.

In the quarter that ended March 31, sales of Clariion systems totaled $419 million, up 47% from $285 million in the year-earlier period. First-quarter 2005 sales of Symmetrix systems, in contrast, declined 3% to $652 million.

Mark Lewis, EMC's chief development officer, said that the company is welcoming the movement of Symmetrix users to midrange systems.

"We just want to be change embracers," Lewis said. "At the end of the day, bring it on. Let it happen. The only risk you always have is sticking your head in the sand."

Joel Schwartz, general manager of EMC's midrange systems division, said that while Symmetrix will remain a standard for highly resilient and high-throughput systems, he isn't troubled by the user movement away from the line. "If you don't cannibalize yourself, someone else will," he said.

Upgraded Clariion

High-end functionality on EMC's midrange arrays:

- Local point-in-time copies (SnapView)
- Remote synchronous and asynchronous replication (MirrorView)
- Full or incremental copies between SANs (SAN Copy)
- Web-based LUN provisioning (Navisphere Management Suite)
- Centralized storage resource management (Visual SRM)

Financial Returns

Paul Stonchus, data center manager at MidAmerica Bank in Clarendon Hills, Ill., said he thinks EMC's midrange and high-end arrays will merge over the next 10 years to become a single line based on the best of their technologies. "The disk form factor is the same. If they merge, then you only have one R&D cost that would be less," said Stonchus, whose bank has a mix of EMC's Symmetrix, Clariion and Centera fixed-data arrays.

Tony Prigmore, an analyst at Enterprise Strategy Group Inc. in Milford, Mass., also said he thinks EMC will eventually move to a combined storage platform with a common set of physical components. He predicted that such a move by EMC would accompany an industrywide convergence of midrange and high-end systems.

Prigmore pointed to IBM's release last fall of its TotalStorage DS8000 line of arrays, which includes both high-end and midrange systems that share common applications and management software.

"We anticipate seeing that same thing with Hitachi Data Systems," he said.

Prigmore said it makes sense that users would stick with high-end arrays if they already had significant investments in storage software and staff trained to support those systems. But, he added, "the gap is closing here, perception-wise." **54521**

MORE THIS ISSUE

EMC will ship its long-awaited virtualization technology in the third quarter. **Page 14**

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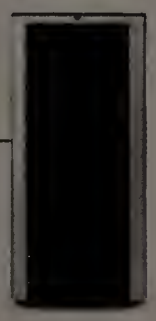

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Continued from page 1

Compliance

gence Corp. in Westwood, Mass., to manage the log data generated by its firewalls. Calpine later connected its other security devices and its routers and switches to the appliance, said Sean Curry, the company's infrastructure engineering manager.

MICHAEL GABRIEL at Career Education says data collection is key to auditing controls.

Then the company realized that the appliance could gather and normalize log information from its Windows and Unix application servers without requiring agents to be installed on those systems, Curry said. That has made it ideal for compliance reporting, he noted.

Calpine began using the appliance to collect information from the servers in January as part of an effort to streamline its Sarbanes-Oxley Act compliance efforts. Curry said the appliance now handles an average of 2,200 log items per second altogether.

Adding to its appeal are functions that let Calpine's internal auditors directly generate the reports they need without involving systems administrators. "We've been able to delegate the logs out of the systems administrator's control," Curry said.

Catholic Healthcare Partners, a large health care system based in Cincinnati, is deploying a similar device made by Intellitactics Inc. in Reston, Va., to manage log data from more than 2,000 servers spread across its 10 operating regions and two data centers.

"If I spent five minutes per day looking at the logs from each system, it would take me 20 man-days per day to look at everything. It was just too unreasonable," said Tim Harrison, information security officer at Catholic Healthcare.

But the Health Insurance Portability and Accountability Act mandates that companies demonstrate that they have the necessary controls in place for protecting sensitive data. Harrison said the Intellitactics appliance will eventually help Catholic Healthcare deal with roughly 100 million log items every day, including data gathered from all of the company's myriad security devices.

The appliance is expected to allow security teams and systems administrators to get detailed views of log information pertaining to their specific domains, he said. In addition, the company's auditors should be able to specify the kind of data they need to see for compliance purposes.

Two-Pronged Approach

Michael Gabriel, corporate IT security manager at Hoffman Estates, Ill.-based Career Education Corp., a $1.73 billion provider of postsecondary education, said there are two aspects to auditing internal controls on end users' access to systems and data.

"There's the part that deals with the collection of the data, and there's the part that deals with the mining of the data for useful information," Gabriel said. "If you aren't doing the first one right, the second doesn't matter."

Career Education is using a product from Edison, N.J.-based NetForensics Inc. to collect about 6 million log items per day from its systems. The technology has "put us in a position where we can demonstrate we have all the needed controls," Gabriel said.

"The ability of these tools to centralize reporting capabilities is one of their chief values from an auditing and compliance standpoint," said Scott Crawford, an analyst at Enterprise Management Associates Inc. in Boulder, Colo.

Gartner's Williams noted that the technology's support for collecting information from virtually any source has made it ideal for monitoring activity on sensitive systems such as accounting and human resources. **54539**

User Demand Sparks Vendor Changes

THE INCREASING USE of security event and information management appliances for regulatory compliance reporting is prompting some vendors to tweak their product development and marketing strategies.

Last week, for instance, San Jose-based NetIQ Corp. announced compliance-oriented versions of its security event management products. Its Security Compliance Suite comes in two flavors and features a new log-management component and templates designed to help companies assess and report on their compliance with laws such as the Sarbanes-Oxley Act, HIPAA and the Gramm-Leach-Bliley Act.

In March, Network Intelligence upgraded its enVision security event management suite with a new compliance-reporting dashboard and functions for gathering log information from a wider set of sources, including IBM's older OS/390 mainframes and AS/400 systems and Web servers that run Microsoft Corp.'s Internet Information Services software.

Market forces are driving the changes, said Jim Melvin, vice president of marketing at Network Intelligence. The tools were once used purely for collecting information from firewalls and intrusion-detection systems to support IT security efforts, Melvin said. But over the past two quarters, demand from security users has been matched by interest from companies looking to use the products for compliance reporting, he said.

Pam Casale, vice president of product management at Intellitactics, said the company added features for automating log monitoring and reporting in April after it also started seeing increasing demand for such capabilities.

"It's changing the way we develop products," said Tom Foladare, senior director of business development at NetForensics. "Now we worry about asset groups and business processes and being able to take every server that is dealing with a SOX issue and put them into different groups."

– Jaikumar Vijayan

EMC Sets Pricing, Availability Of Virtualization Technology

BY LUCAS MEARIAN
NEW ORLEANS

EMC Corp. formally announced a shipping schedule for its long-awaited storage virtualization technology last week at its annual user conference here.

EMC officials acknowledged that the availability of Invista, code-named Storage Router, is a quarter behind schedule. Company executives attributed the delay to "common" development issues.

Users interviewed last week downplayed the delay, saying that they are in no rush to implement the technology, which is priced starting at $225,000.

The new Invista system will reside on products from three leading switch vendors and will be generally available next quarter, said Mark Lewis, chief development officer at EMC.

Paul Stonchus, a data center manager at MidAmerica Bank in Clarendon Hills, Ill., said that he has EMC Symmetrix, Clariion and Centera arrays in his data center and would eventually like to use Invista to migrate data across arrays. But he noted that he's not yet ready to "reinvent the wheel."

"I'm intrigued by it," he said. "Once we decide to cross our Clariion and Symmetrix [environments], it will make all the sense in the world. But for now, I'll wait for Rev. 2."

Speaking at EMC's Technology Summit here, Lewis told about 4,000 attendees that Invista will be most valuable in migrating data off aging systems or from one box to another during software upgrades in order to avoid disrupting applications.

Michael Berthiaume, a systems analyst at American Power Conversion Corp., said he's interested in Invista because it could eliminate planned downtime in data migrations of applications like Lotus Notes, Oracle and Siebel from high-end systems to midrange systems for better price performance.

Product Plans

According to Lewis, the first version of Invista will reside on EMC's own Connetrix switches, Cisco Systems Inc.'s MDS line of switches and Brocade Communications Systems Inc.'s multiprotocol switches. It is expected to be available on McData Corp.'s switches in early 2006.

The switch-based virtualization firmware will support all of EMC's Clariion and Symmetrix storage offerings, as well as systems from Hewlett-Packard Co., IBM and Hitachi Data Systems Corp., according to Lewis.

Nancy Hurley, an analyst at Enterprise Strategy Group Inc. in Milford, Mass., said that while EMC is the last of the leading vendors to release a virtualization product of this caliber, the gradual adoption of virtualization technologies will allow it to gain adequate market share. IBM, Network Appliance Inc., HP and Hitachi are already selling competitive systems.

Mario Arbelaez, a storage engineer at software vendor Acxiom Corp. in Little Rock, Ark., said he would like to evaluate Invista because migrating data when upgrading storage management software causes application downtime. Arbelaez, who has storage from HP, IBM, Storage Technology Corp. and EMC, said Invista's $225,000 price tag isn't too expensive "when you're talking trying to migrate 25TB of data." **54519**

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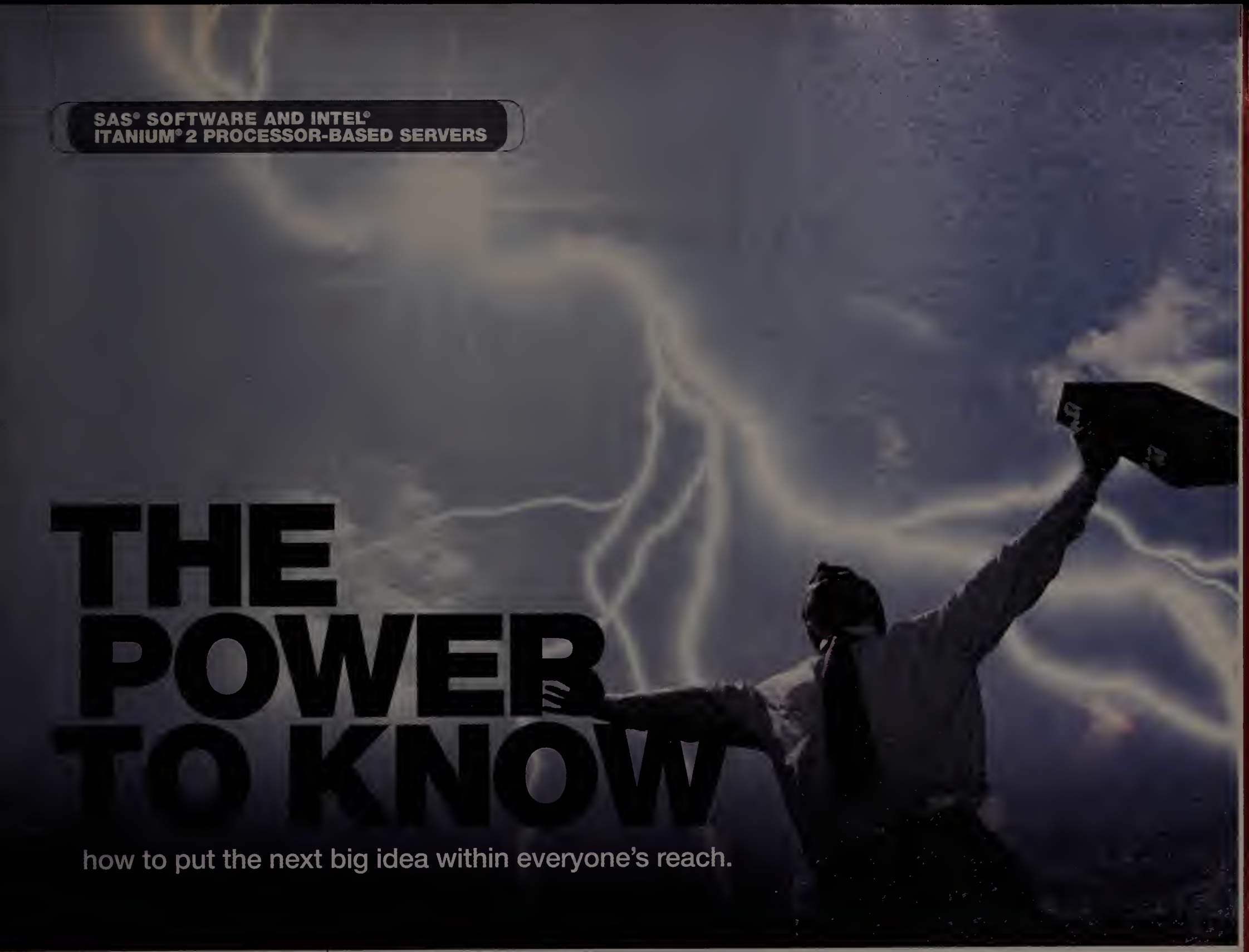

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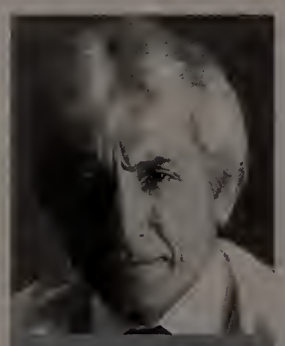
DON TENNANT

A Matter of Image

HOW'S THIS FOR BAD LUCK? You're a bank, and your check-sorting machine goofs up and puts canceled checks in the wrong statement envelope so they're sent out to the wrong customer. How's this for worse luck? The wrong customer is a journalist. Me.

You can imagine my befuddlement when I opened my bank statement a couple of weeks ago and found five canceled checks that weren't mine. The checks were written by another customer here in Massachusetts, a person we'll call "Joan Day." We'll call her that for two reasons: First, it's not her real name; second, "Jane Doe" is way overused.



DON TENNANT is editor in chief of Computerworld. You can contact him at don_tennant@computerworld.com.

Now, from these checks, here's what I know about Joan: Her name, husband's name, address, home phone number, driver's license number and expiration date, date of birth and checking account number. I also have five signature samples. Oh, and I know where Joan likes to shop, and that she has a kid taking gymnastics.

This compromise of Joan's personal information was bad news — not only for Joan, but for the bank whose mistake allowed it to happen. Citizens Bank, an arm of Citizens Financial Group Inc. in Providence, R.I., is aware that any bank's lifeblood is the confidence of its customers, and that includes confidence that personal privacy will be protected.

So, how does something like this happen? According to Avivah Litan, an analyst at Gartner Inc., it's "sloppy work" that's "really inexcusable."

Litan contends that banks' check-processing resources "are being funneled to electronic image capture at the expense of the manual check-handling process."

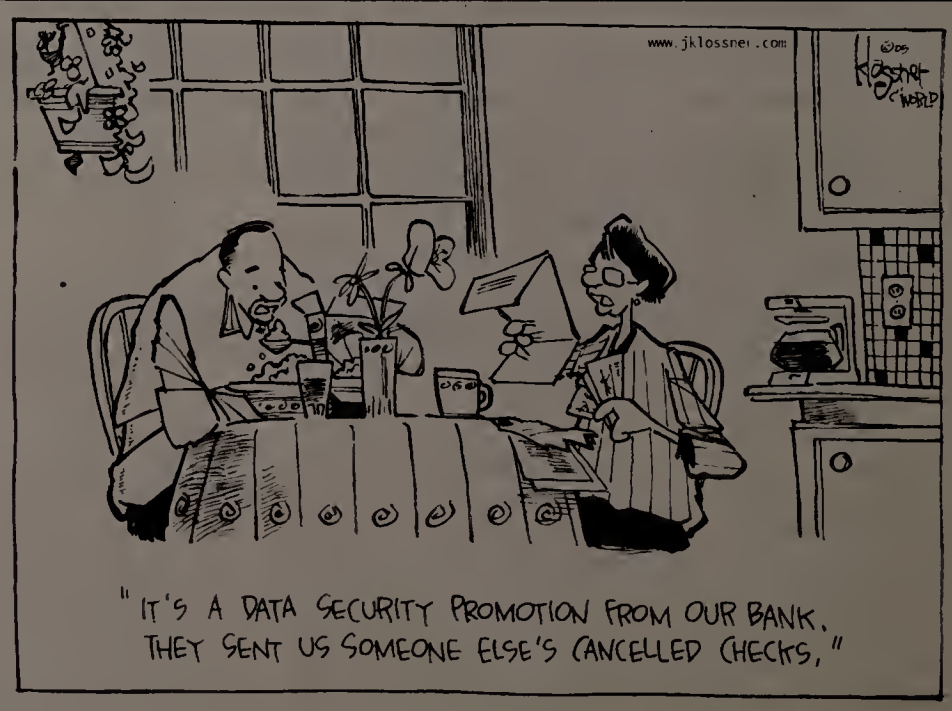
Interesting that Litan mentioned electronic image capture. It so happens that my statement envelope contained a brochure inviting me to opt for check imaging. The brochure promoted the service, which would provide images of the checks on the statement rather than the canceled checks themselves, as one that would "reduce the risk of misplacing a canceled check." I don't think they were referring to the risk of the bank misplacing it, but you get the idea.

The good news is that when I informed the bank of the breach, the matter was taken seriously. A spokeswoman said Joan would be notified immediately, receive an apology and be given the option of closing her account and opening a new one. Commendably, moreover, I was put in touch with Bill Wray, CIO at Citizens Financial Group, to discuss the goof-up.

Wray certainly didn't diminish the seriousness of the compromise, but he dismissed the notion of it being a resource allocation issue. He explained that when you have around 5 million checks running through electromechanical sorters nightly, on very rare occasions the checks might stick together and be stuffed in the wrong envelope. Wray noted that with check imaging, there's virtually no chance for this to happen, and there's an added fraud-management benefit, since investigators can get immediate access to check images. Seems to me that going the imaging route is a no-brainer.

It makes me wonder why Massachusetts law requires customers to opt in for check imaging, while all the other states in which Citizens Bank does business require customers to opt out if they want to continue receiving their canceled paper checks instead. Given that Joan's checks could easily have ended up in even worse hands than mine, I'd say this is a case when opt-out is clearly the superior approach. **54470**

Don Tennant

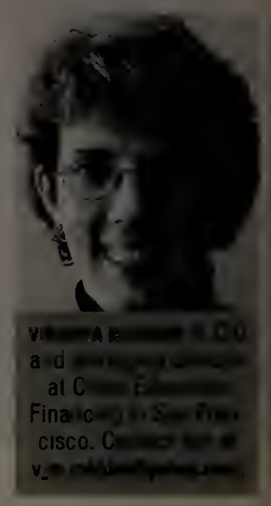


VIRGINIA ROBBINS

Riding the Wave to a Perfect Day

YOU'VE HAD one of those days. No, not one of those days that cause you to wonder why in the world you ever chose mathematics over marketing or computer science over cultural anthropology. No, it was one of those days when it all comes together, when the major installation hits and — deep breath — actually works.

On days like this, you think of the people on your team who made this happen, admiring their dedication and persistence. You also think of the owners of the project, from the head of marketing to the part-time customer service rep, who dedicated time and resources to make sure that your people had a solid business case and good requirements. You even remember back to the governance meeting when this particular project was chosen. You knew then that it wasn't going to be easy but that if you could get it done, you'd make the company even more competitive. You knew it was going to be a great project.



And then along came another great project. It was also critical to the company's success, and it quickly became clear that you needed to do both. But that was OK, you figured, because the first project should be over months ahead of the second.

Then stuff began to happen. A month into the work, you felt as if both projects were slipping through your fingers. Doing both at once and maintaining normal work was straining the resources of the rest of the company. First, the business requirements came in just under the wire. Then the vendors made offers that you could refuse, and negotiations with legal never seemed to quite reach an end. The second month went by, and then the third.

Soon it became apparent that both

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WAN Interface Slots	n/a	6 Open Slots	6 Open Slots
Fixed WAN Interfaces	2xT1 or 2xE1 or 2xSerial	n/a	n/a
WAN Interface Modules	n/a	2xT1/2xE1/ 2xSerial/2xFE	2xT1/2xE1/ 2xSerial/2xFE/DS3
Memory	256 or 512 MB DRAM	256 or 512 MB DRAM	256/512/1024 MB DRAM
Redundancy	No	No	Power
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projects would launch in the same month. The team started talking about a perfect storm. You kept thinking about the movie — don't they all die in the movie? It could indeed be a perfect storm, at least for your career.

Then early code releases were delivered. The business owners started to get excited. The buzz among them was that this was going to be a killer app. Right then in the meeting you started thinking, Just what I need — the killer app in the perfect storm. There were far too many references to death, and your inward chant became "Live, project, live!"

But that's when the team started to hit its groove. Technical issues arose but were quickly resolved. Testing continued, with bugs getting worked out faster than QA could keep up with their documentation. Early soft launches for both projects were discussed and approved. The soft launches hit, experienced a few bumps but went on.

And today, when you launched, it was smooth sailing. No perfect storm, just two killer apps riding the waves.

Now, as you're walking down the hallway feeling relieved, you glance at your BlackBerry and see an e-mail from the CFO. Apparently there is a concern in accounting.

You craft your polite response to the CFO, cc'ing the project manager. The project manager bolts out of a meeting, finds you and tells you that yes, accounting had recently expressed some reservations, but it had signed off on the process a month ago. The project manager and the CFO straighten everything out, and 90 minutes later there are no more concerns in accounting. You finally breathe, head back to the hotel and call home.

It's been a great day. **54412**

DAVID MOSCHELLA

IT at the Front of Your Company

HOW MANY TIMES over the past year have you heard someone proclaim that blogs, particularly in conjunction with RSS, are the next big thing?

The latest and loudest of these assertions came from *Business Week*. The cover of its May 2 issue screams in giant red type that "blogs will change your business." After all, they brought down Dan Rather.

Although it's easy enough to deflate some of this hype, a more practical exercise is to try to ask what blogs, RSS, podcasts, peer-to-peer and the whole "smart mob" movement might mean to corporate IT. Perhaps not surprisingly, the answer is "It depends," a response that isn't as equivocal as it might first appear.

DAVID MOSCHELLA is the global research director at the Leading Edge Forum, a Computer Sciences Corp. company. Contact him at dmoschella@earthlink.net.

Exaggerations aside, it's true that the explosion in blog usage is evidence of a significant new IT frontier. For many years, IT was primarily used to automate the flow of records, documents and communication inside your organization. Then, with the Web's arrival, direct links with customers and suppliers proliferated. This latest set of tools and services has the potential to capture the conversations, feelings and activity of your actual marketplaces. Essentially, a new platform is emerging at the very front of your company.

As I have argued several times in this column, the task of IT value creation is becoming the responsibility of not only IT suppliers and departments, but also customers themselves. Business books and journals now promote concepts such as co-evolution, co-creation, customer experience and democratic innovation. That speaks to a trend that feels fuzzy today but will likely appear obvious within a few years. Successful companies will find ways to harness the energies of their customers, as the open-source movement already has.

That the significance of these ideas depends upon the business you're in is nothing new. Clearly, industries such as health care, entertainment and automobiles tend to have more-active communities of customers than, say, canned foods. But it's not hard to imagine that within a few years, forward-thinking companies in an impressive range of sectors will have real-time systems that capture, map and respond to the way their products and services are being used, evaluated and discussed. Such systems could render many traditional forms of market research obsolete.

And for corporate IT, that is the rub. What role, if any, will you play in influencing the development of systems that will principally serve the needs of marketing, product development and customer service, but often with little direct connection to the back-end transaction systems managed by corporate IT? Just as marketing typically controls the company Web site, it will also take the lead on these high-profile and often experimental initiatives. The question is whether it will look to corporate IT for help or decide that the expertise it needs resides elsewhere.

One of the misconceptions regarding the use of outsourced services is that they are best suited for low-value, back-office activity. But high-value services requiring scarce capabilities can be an equally attractive option. A whole new set of enhanced search, business intelligence and pattern-recognition suppliers is emerging that will be at the cutting edge of front-of-the-company technology deployment.

My company's research shows that when it comes to the IT organization's relationships with key company domains, the most fractious is often with marketing. Whether corporate IT will play a big role in the customer-driven world of the future will largely depend upon whether this relationship becomes more closely aligned. **54405**

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READERS' LETTERS

Cohen Is Right: Visas Are Wrong

THANK YOU for doing the interview with Gerry Cohen ["Q&A: Information Builders CEO Blasts Gates' H-1B Stand," QuickLink 54143]. This guy is an American hero for sticking to his guns and bucking the popular trends. But most of all, he is a hero for being willing to stick out his neck and tell the IT industry that H-1B and L-1 visas are the wrong solution for this industry.

Cohen says many of the things that the members of TechsUnite and ProgrammersGuild have been saying for years – there is no shortage of workers, and the more that industry demands the importation of cheap labor, the worse the overall IT industry is going to fare in the U.S.

Information Builders, which Cohen built from the ground up, is one of those rare companies that acts ethically while at the same time trying to derive the greatest return for its stockholders. In the past, I was a customer of IBI. It's becoming clear to me that it's the kind of company that I want to be a customer of in the future!

Walt Crosby
Executive vice president,
Terabase Corp.,
Danvers, Mass.,
walt@terabase.com

Apple's Just Another Closed Monopoly . . .

IN HIS letter to the editor about Microsoft and Linux, Daniel Reiss wrote, "Better yet, switch to Apple. Better hardware, better operating system, better use of open-source and no threat of litigation from SCO or Microsoft" [QuickLink 52909].

Whether or not the statements concerning hardware and operating system are true, there is a major problem with this advice. Moving from Microsoft to Apple is like jumping out of the frying pan into the fire. You have only traded monopolies. You have gone from an organization that controls the operating system and software to one that controls the hardware and operating system. You have gone from one straitjacket to another. You may be better off for a while, but eventually you will be in trouble because you are in a closed, controlled, monopolistic system. Currently, the only viable alternative is Linux, open systems and a variety of hardware.

George Washburn
Marion, Ala.

. . . And It Charges Big Bucks for 'Cool'

I WHOLEHEARTEDLY AGREE with Michael Gartenberg's opinion about the features on Apple's new Tiger operating system: They are cool ["Apple Takes Major Leap With Tiger," QuickLink 53958]. What he hasn't worked out, apparently, is that corporate America doesn't want to pay for cool.

Apple consistently extracts more money from your pocket than most other manufacturers, and it is more proprietary than Microsoft has ever been, yet it still wonders why its market share doesn't increase by leaps and bounds.

I'm sorry, but you are going to have to convince me that Apple has shed its exclusivity before I will even get interested again.

Bob Sibson
Enterprise architect,
Adelaide, South Australia

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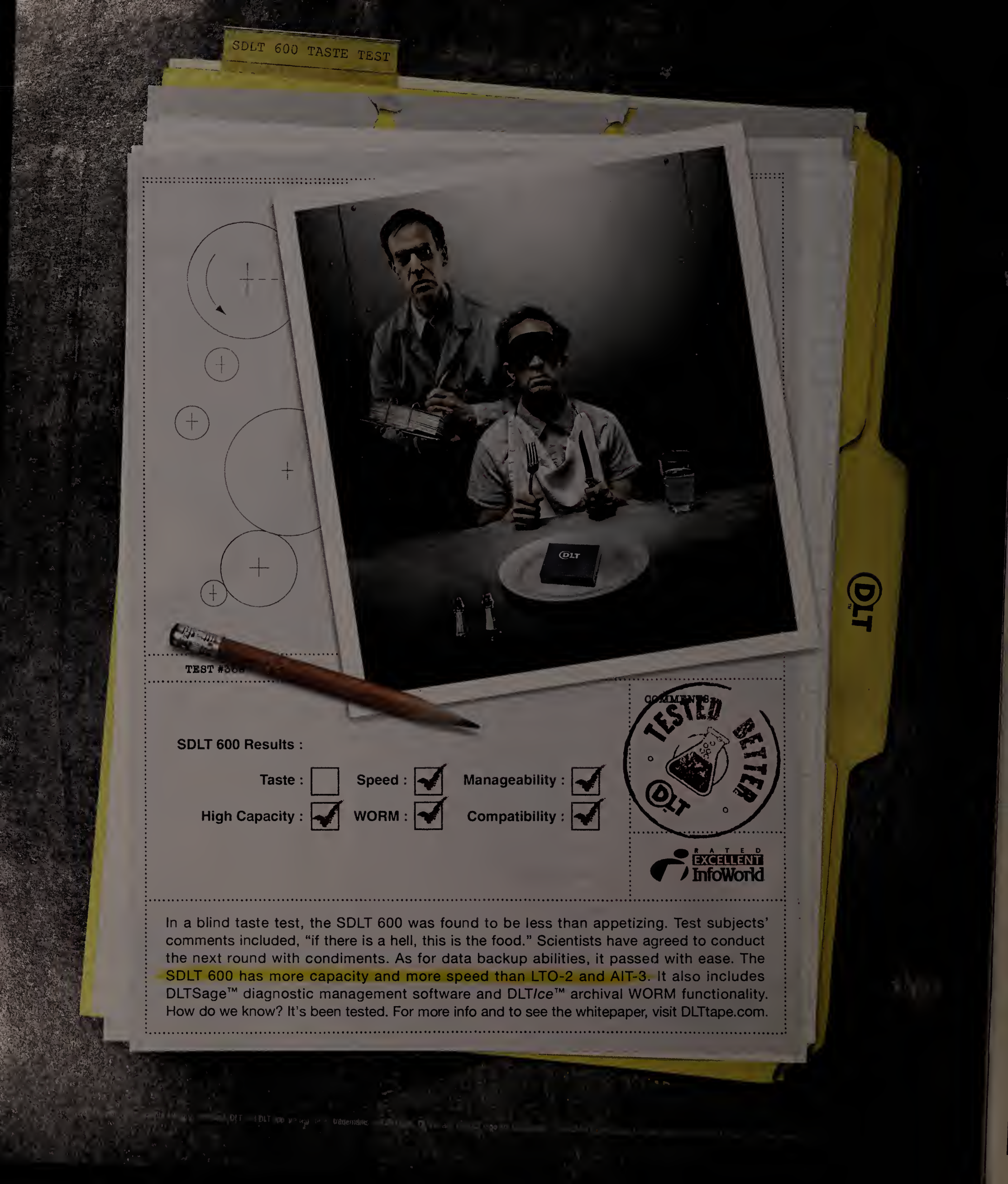
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DLT

Rounding Up Business Rules

Organizations are finding that business rules engines and management systems can automate enforcement of the rules necessary to make processes run smoothly. IT leaders such as Donna Ramos-Johnson explain how. **Page 24**

SECURITY MANAGER'S JOURNAL

Protecting Consumer Data on the Cheap

A mandate to protect personal data in the state agency's databases isn't accompanied by any extra funds, so C.J. Kelly has to come up with an inexpensive way to do it. **Page 30**

FUTURE WATCH

Coming: Sensors and Pixels Everywhere

Accenture's Anatole Gershman discusses ongoing work on intelligence technologies that are aimed at connecting IT systems with the physical world. **Page 34**

WILLIAM RIESER

Pick YOUR Battles

Vulnerability management technology allows companies to choose which threats are most urgent and which IT assets take priority for protection.

BY JAIKUMAR VIJAYAN

LLOYD HESSION has a simple philosophy for dealing with vulnerabilities on his company's network: Know which ones have to be fixed right away and which can be safely put off for later.

The sheer number of vulnerabilities that can exist on a network make it impossible to address all of them at the same time without serious disruption, says Hession, chief information security officer at Radianz, a New York-based provider of network connectivity services to financial firms.

So the key is to have a formal vulnerability management process to identify problems, categorize them by severity and prioritize responses, he explains.

"It's all about arriving at some sort of a risk determination and figuring how seriously you need to address it," he says. "The days of people running out and patching everything are over."

Hession isn't alone. Finding out what to protect on the network and how much protection is needed is suddenly becoming a lot more important to companies than it was even two years ago, says Scott Crawford, an analyst at Enterprise Management Associates in Boulder, Colo.

The never-ending barrage of software vulnerability announcements and the constant, sometimes competing, need to fix them is pushing companies to look for more efficient ways to deal with the problem, he says.

Instead of rushing to apply costly fixes to every flaw that's announced, the goal is to take a more selective approach by prioritizing threats, adds Crawford.

"Vulnerability management tools are going to be in great demand where exposure to external risk is high," Crawford says. That's because the tools are designed to impose order on a process that has, in the past, simply been urgently reactive.

There are several components to a

SOFTWARE AND SERVICES:

Options

THOUGH COMPANIES have started adopting formal vulnerability management practices only fairly recently, there are already several tools and services available to help them through the process.

Some vendors, such as Qualys in Redwood Shores, Calif., Counterpane Internet Security Inc. in Mountain View, Calif., and Internet Security Systems (ISS) in Atlanta, offer vulnerability management services as part of their managed security services portfolio.

Qualys, for instance, offers an on-demand service called QualysGuard that uses a vulnerability database containing more than 4,000 unique tests to help companies identify, prioritize, fix and monitor problems on their networks, says Chief Technology Officer Gerhard Eschelbeck.

ISS offers a similar scanning service that companies can use to probe network assets such as application servers, databases, firewalls and Web server routers and switches for exploitable flaws. The service can be combined with ISS's managed intrusion prevention and managed firewall service, says Dave Ostrowski, an ISS product manager. ISS also sells a hardware appliance for vulnerability scanning.

Others, such as Foundstone Inc., which was acquired by Santa Clara, Calif.-based McAfee Inc., and San Francisco-based nCircle Network Security Inc., offer an appliance-based approach to vulnerability management. The Foundstone Enterprise appliance and nCircle's IP360 Vulnerability Management System are designed to let companies continuously monitor their networks and probe all discovered hosts for vulnerabilities.

An optional Threat Correlation Module allows companies to create a numerical risk ranking for each threat by tying events – such as the emergence of exploits – to asset and vulnerability information, says George Kurtz, a senior vice president at Foundstone.

Another vendor in this market is Skybox Security. The company sells software that a business can use to build a virtual model of its entire network, including vulnerabilities, that can then be used to simulate a variety of attack scenarios. The virtual model allows administrators to understand how systems are connected to one another in a network and to do what-if and business-impact analysis using various attack and remediation scenarios.

The goal is to give companies a "surgical list of things to do" to address network vulnerabilities in the most cost-effective fashion, says Ed Cooper, vice president of product management at Skybox.

– Jaikumar Vijayan

vulnerability management process, users say. Fundamental to the effort are vulnerability assessment scans. They help companies discover network assets and any software holes or configuration errors that might exist in them.

Vulnerability and asset classification, as well as risk metrics, are needed to help companies prioritize responses to the threats.

Mitigation and blocking measures may be needed to deal with some threats for which software updates or other fixes may not be immediately available. And monitoring and measurement processes are crucial to ensure that fixes and changes that have been made remain in place.

Detection and Remediation

A good management process helps companies identify and remediate the network vulnerabilities that really matter, says Derek Milroy, a security architect at Career Education Corp. (CEC), a $1.73 billion company in Hoffman Estates, Ill., that runs post-secondary education programs.

A vulnerability management system allows companies to collect information on and understand various threats to corporate networks, and it shortens the reaction time needed to deal with them, he says. Also important, it enables IT administrators to focus their time and resources on only the problems that need fixing, Milroy says.

"It really is the core central instrumentation that enables a security function to operate within the organization," says Robert Garigue, chief information security officer at the Bank of Montreal in Toronto.

Radianz has adopted several measures for managing vulnerabilities on its networks and systems. The company doesn't do too many routine vulnerability scans, Hession says. But when it does, it looks for known software holes as well as configuration errors, rogue machines and services that could be exploited, he says.

Radianz has also classified its systems into various groups depending on their importance to the organization. Critical financial and human resources systems and those belonging to senior executives, for instance, get fixed faster than those that aren't as important. Most of the company's desktops have host firewalls for detecting and blocking intrusions at the client level.

"This way, even if there are any vulnerabilities on those systems, they are not directly exploitable because of the fact that the personal firewalls are blocking it," Hession explains. "It buys you some time to go out and patch systems."

Asset and response prioritization is a key aspect of any vulnerability management strategy, Milroy says.

Categorizing Assets

For the past nine months, CEC has been using an on-demand service from Qualys Inc. to perform asset discovery, asset prioritization, vulnerability assessment and analysis as well as remediation.

Like many other companies, CEC has organized its network assets into multiple security categories. It rates those categories from 1 to 5 depending on their importance to enterprise operations. Data center servers and those running crucial databases and revenue-generating applications, for instance, are considered Category 5, while some rarely used file servers might be a Category 1.

> **"You need to have a good quantitative understanding of what the tools are trying to tell you before you go to the business side and ask them to fix things.**
>
> **ROBERT GARIGUE**, CISO, BANK OF MONTREAL

Similarly, vulnerabilities are color-coded depending on their severity, with red being the most critical. CEC runs weekly vulnerability scans of its network and prioritizes its responses based on asset importance and vulnerability severity.

A vulnerability in a database server that can be remotely exploited or for which a worm already exists might be assigned a Red 5 rating, which means that it needs to be fixed immediately, Milroy says.

In some cases, a serious vulnerability might exist in a critical system but there may be no immediate threat directed against it, in which case it may be better to do a more planned remediation rather than risk the disruption of an immediate fix, he says.

Realistic Strategies

CEC largely depends on vendor classifications to determine the severity of vulnerabilities, but it also uses its own internal filters and analysis to determine whether an issue is really critical.

"I'm trying to keep it realistic. All you really care for are the Category 5 vulnerabilities," Milroy says. "Can you root the machine? Can it get hit by a worm? Is it remotely exploitable?"

Key to a good vulnerability management strategy is an understanding of the various interdependencies that exist between systems on your network, says Ed Cooper, vice president of product management at Skybox Security Inc., a Palo Alto, Calif.-based vendor of risk management software.

Sometimes, for instance, fixing the problem on a single upstream server or router may be all that's needed to mitigate the risk posed by a vulnerability on multiple servers, he says.

Knowing precisely which holes to close on which server or workstation can tremendously reduce response times and help focus effort on the real threats, Cooper says.

Skybox offers a tool that allows a company to build virtual models of its entire network that it can use to simulate attacks and understand the potential consequences of vulnerabilities.

Often, the risk a vulnerability poses to a system might need to be balanced against the potential business disruption or revenue loss that might result from taking the system down to fix it, says David Giambruno, director of strategic infrastructure and security at Pitney Bowes Inc., a $5 billion mail and document management firm

based in Stamford, Conn.

Software patches and mitigation approaches can sometimes interrupt needed services or functions on core systems, causing problems that ripple throughout the business.

In such cases, it's a good idea to have an "exceptions management" process under which some sort of compensating controls are put in place. It's also a good idea to make business owners aware of all potential risks and have them sign off on it, Giambruno says.

The complexity of modern networks makes it vital to have tools for automating the discovery and remediation of assets and vulnerabilities at the network, application and database levels, Giambruno says.

For example, Pitney Bowes is using a service from McAfee Inc.'s Foundstone Inc. business to scan its networks for vulnerabilities once a week.

A real-time patch and configuration management tool from BigFix Inc. in Emeryville, Calif., helps Pitney Bowes quickly test and deploy patches across its global infrastructure in less than an hour if needed.

A database-scanning tool called AppDetective from Application Security Inc. in New York helps Pitney Bowes scan for and discover any vulnerabilties that might exist in the database.

PROTECTING DIGITAL ASSETS:

10 Steps

1. **POLICY.** Establish processes, standards and guidelines.
2. **INVENTORY.** Discover all assets across the network.
3. **PRIORITIZE.** Assign business value to assets.
4. **VULNERABILITIES.** Determine vulnerabilities on assets.
5. **THREATS.** View potential threats.
6. **RISK.** Determine the risk levels.
7. **BLOCK.** Stop intrusions in real time.
8. **REMEDIATION.** Proactively fix vulnerabilties.
9. **MEASURE.** Measure impact of security decisions and actions.
10. **COMPLIANCE.** Review for policy compliance.

SOURCE: MCAFEE INC.

Mandate to Act

Vulnerability management tools and practices can provide a lot of good information about the risks companies face, but they raise their own challenges, users say.

"Vulnerability assessment gives you this view of the entire organization. Then you've got to analyze the results and ask yourself, 'What have I seen? What does it mean, and who is responsible for fixing it?' " says Garigue.

"You need to have a good quantitative understanding of what the tools are trying to tell you before you go to the business side and ask them to fix things," Garigue says. "If not, you are going to end up with a lot of cross talk."

Desktops and other client devices pose big security risks, but scanning them for vulnerabilities can be challenging because they are so portable, says Amy Hennings, assistant director of information security at George Washington University in Washington.

In the university's case, it made personal firewalls freely available to desktop users as part of a bid to improve security. Ironically, those firewalls are now making it difficult to perform vulnerability scans on the systems, Hennings says.

"The key thing to remember is that IT has limited resources," Radianz's Hession says. "So it's all about prioritizing and acknowledging that there'll always be some trade-off issues."

At the same time, though, try to keep it simple. "You don't want to make it overly complicated," Hession says.

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DONNA RAMOS-JOHNSON of Washington's office of the CTO used a business rules engine to determine residents' eligibility for aid programs.

KATHERINE LAMBERT

Rounding Up BUSINESS RULES

Business rules management systems help organizations track and enforce the rules that make a business run — and keep it on the right side of the law. BY SUE HILDRETH

Do you know where all of your company's business rules are?

Most enterprise users are surprised to discover how many important -— and not-so-important — rules, regulations, policies and procedures are scattered all around the organization. For example, last year's marketing manual has guidelines for creating advertising campaigns; equations for calculating employees' health and retirement benefits are embedded in Cobol code; and best practices for writing software code reside only in the minds of senior developers, since no one has been asked to write them down.

In older, slower eras, this diffusion of policies and rules wasn't such a big problem. But business and IT executives find themselves under greater pressure than ever to adapt to rapid changes in the market and in government regulations — as well as to operate at maximum efficiency. As a result, they are looking to round up these renegade rules and put them someplace they can be easily accessed, updated and applied to business processes. To do that, they're turning to business rules engines — execution environments and repositories for business rules — and management systems.

CATCHING ERRANT CLAIMS

A case in point: The District of Columbia provides financial assistance to needy residents, some of whom also qualify for Medicaid or other federal programs. Recently, managers working for the district discovered that the local aid program was often getting the bill for services that should have been covered by federal programs. If an employee failed to catch such errors, it would be a costly misapplication of the rules.

To catch more of the bad claims and more quickly process legitimate ones, the district began developing its Automated Client Eligibility Determination System. The new system relies on ILOG Inc.'s ILOG Rules business rules engine to determine eligibility for D.C. and federal programs. It asks applicants a series of questions — much like a TurboTax automated tax program does — and then prints out com-

pleted applications for the programs for which they are qualified.

The ILOG engine, which is accessible to anyone with a Web browser, has a very high accuracy rating — 99%, according to Donna Ramos-Johnson, associate director at Washington's Office of the Chief Technology Officer. That delivers better performance than the legacy system, which is an IBM mainframe running an Adabas/Natural database that was used internally for claims processing and financial transactions.

Ramos-Johnson says more federal programs will be added to the rules repository, which will eventually be used by the legacy system as well. "We expect to have the major federal programs online by September," she says.

WHO NEEDS THEM

Rules engines have been around since the early 1990s when companies such as Pegasystems Inc. in Cambridge, Mass., Fair Isaac Corp. in Minneapolis and ILOG in Mountain View, Calif., sold them. They were typically used in rules-heavy industries such as finance and insurance. Over the past few years, however, many vendors have entered the market, and more companies are looking at rules engines as a way to gain greater flexibility in business operations.

"What's driving new interest in business rules is the need for business agility," says David Kelly, president of Upside Research Inc. in Newton, Mass. "Companies need to be able to create applications and business processes that can adapt rapidly to marketplace demands."

Rules engines provide this kind of flexibility by making it possible to edit the steps, or rules, of a business process. Traditionally, those steps have been coded into the application. But with a rules engine, they can be written in a natural-language authoring language and stored separately in a managed repository. Applications are then instructed to access the rules engine, and the rules themselves can be updated quickly by semitechnical users rather than programmers.

Also, notes Kelly, business rules systems can help companies prove compliance with government regulations by providing an audit trail of procedures and changes to those procedures.

LIVING WITH LEGACY APPS

Legacy applications are one major reason organizations are turning to rules engines. When companies have many rules embedded in legacy code, moving them to a rules engine enables users to make changes without having to constantly rewrite code.

Sterling, Va.-based First American Field Services, which provides property inspection and maintenance services to banks, turned to rules management after it reached an impasse with its legacy system.

"It was so spider-webbed, there was custom code for each of our clients,

GOOD

A BUSINESS RULES ENGINE is only as good as what's in it. And the first step of any business rules project should be to identify all of the rules in your organization, according to Ladd Bethune, senior technical consultant at Lambert Technical Services LLC in Lebanon, Conn.

Once you've identified and extracted your existing rules, and before you transfer them into a business rules engine, you need to evaluate the quality of the rules, says Bethune. They may need to be edited or rewritten in order to make them sustainable for the long term.

According to Bethune, sustainable business rules have at least 12 characteristics. They should be adaptable, auditable, easily implemented, extensible, manageable, queryable, reusable, securable, testable, traceable, understandable and verifiable.

– Sue Hildreth

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and it was just so difficult to change," says Mark Davis, development manager for MIS at First American.

Three years ago, First American began developing a property inspection and maintenance system using Fair Isaac's Blaze Advisor rules engine. That application is linked to a DB2 database and Visual Basic .Net workflow engines that consult the rules engine to determine a course of action, such as what service to order. Rules are edited via an English-based authoring language and Fair Isaac's Visual Ruleflow Editor, with drag-and-drop icons for graphically creating business processes.

BRMS

Michael Barnes, vice president of technology research services at Gartner Inc., says typically have the following features:

- Guidelines for identifying and documenting rules
- A graphical user interface for authoring and editing the rules
- Visualization of the process flows created by multiple rules
- Rule testing and debugging
- Integration with other development applications
- Rules-mining capability to harvest rules from legacy systems
- A rules repository
- Support for role-based access by different users
- Reporting and querying capabilities
- Support for versioning
- Rule consistency checks to ensure accuracy and enable rules reuse

"It's very easy to make changes now," says Davis.

Brian Stucky, the "enterprise rule steward" at New York-based Freddie Mac, also credits business rules management with simplifying the process of changing rules. Managing policies became much easier after the federally chartered mortgage lender replaced a legacy system with an application tied to an ILOG JRules engine.

"We have a huge number of business rules. Before, to make a change, we'd have to get a mainframe guy to find the rule, make the change, retest the system, put it back into service," Stucky says. "It was such a lengthy procedure that we often waited until we had several changes to make. Now we can support rapid change in rules as needed."

Other companies are also using rules engines to improve operating efficiency. AMR Inc., a national medical transportation company in Greenwood Village, Colo., uses a rules engine to manage its fleet of vehicles more cost-effectively.

"Before, if someone needed transport to get an X-ray, we might send out the most expensive rig — an advanced life-support system — and transport them to the hospital at a high cost," explains Mark Kalevik, a software engineering manager at AMR. Now the company relies on CleverPath Aion Business Rules Expert from Computer Associates International Inc. to determine which type of vehicle to authorize and how quickly it must respond.

DRIVEN BY BPM AND SOA

Interest in business process management (BPM) is also driving interest in business rules.

"Business rules engines are becoming an important part of other solutions, such as business process management," says Kelly, noting that it's common for BPM vendors to partner with rules engine providers.

Another complementary trend is the increasing use of Web services and service-oriented architectures. When building an SOA framework, organizations are adding a business rules layer to go along with the business logic, workflow and data layers.

Chicago-based Promissor Inc., a provider of educational testing and licensing services, is developing just such an SOA. The company created a registration system that could be used remotely by on-site registrars with laptops or handheld devices for screening and registering test applicants. To make the system more accessible by handhelds in remote locations, Promissor built the application using Web services.

"We've rearchitected, with the rules engine as the cornerstone," says Robert Crouch, vice president of IT at Promissor. The company selected Sewickley, Pa.-based Haley Systems Inc.'s Haley-Rules engine and HaleyAuthority rules-authoring tool to create and manage the registration rules. "The Haley engine is light enough to load on a PDA, so we do not need Internet connectivity to operate," Crouch says.

Promissor preferred Haley's natural-language interface, which enabled business users to easily edit rules. It also liked Haley's small footprint, says Crouch.

Options for viewing and editing rules can be important. Users may want to work with rules via a decision table, a decision tree or some other format that they're familiar with.

Cesar Gomez, manager of systems operations and application development at Horizon Casualty Services in Newark, N.J., especially likes the visual features of the RulesPower product from RulesPower Inc. in Burlington, Mass., which Horizon installed as part of a new bill-processing program last year.

"What impressed us was the visual diagramming of the workflows," Gomez says. "It's like an interactive Visio screen. It gave the business people the ability to visualize how the business rules flowed within the program."

Horizon's RulesPower-based bill-processing application has enabled the firm to reassign three of its six bill processors to handling exceptions — nonstandard claims that require human scrutiny — and to substantially reduce its backlog of claims. The use of a rules engine has even cut the cost of processing a claim by 30%, according to Gomez.

USER-FRIENDLINESS

What matters in a rules management system, says Barnes, isn't the list of features; it's how user-friendly it is to nontechnical people. Most organizations buying rules engines today want their business managers to be able to create and edit their own rules.

"The real differences, and the real areas for improvement, have to do with usability," says Barnes. He suggests that businesses begin by evaluating how easy it is for users to formulate business rules with the product.

"The value proposition of a rules engine is the ability to manage business rules, and those rules should be defined by business people," Barnes says. "Unfortunately, many products are still too immature and too technical at this point." **54280**

Hildreth is a freelance writer in Waltham, Mass. She can be reached at Sue.Hildreth@comcast.net.

VENDORS AND PRODUCTS

For a list of rules engines and business rules management systems vendors, visit our Web site:

QuickLink 54510
www.computerworld.com

Advise OR Control

James Sinur, an analyst at Gartner Inc., explains that rules engines are used either to control transactions and processes or to provide advice and analysis.

"About 50% of business rules engines are used in an advisory role: 'Should I do this or that?' The other 50% are used in business processes," he says.

According to Sinur, there are three categories of rules systems.

1. SIMPLE RULES EXTERNALIZATION. This system allows an organization to express its rules in a standard format, house them in a repository, view them in decision trees or tables, and edit them as needed.

2. INFERENCE ENGINE. If the questions you need to put to a rules engine tend to be more sophisticated than simple "yes" or "no" equations, then you may need an inference engine, which uses probabilities and backward chaining through the rules to discover multiple possible solutions to the same end.

3. BEHAVIORAL LEARNING. These advanced systems use case-based reasoning and are "trained" to recognize a variety of scenarios.

– Sue Hildreth

CIO Discusses IT Methods for Mergers

BY ROBERT L. MITCHELL

Ed Kamins, *CIO of $10 billion computer systems distributor Avnet Inc. in Phoenix, recently spoke to* Compterworld *about the challenges posed by multiple mergers and massive IT consolidation projects.*

You're restructuring your IT infrastructure. Can you give examples of what you're doing? We had nine ERP systems in various places around the world. Today, we are fundamentally down to four and continuing to consolidate. By the first of the fiscal year [in July], we will be entirely on SAP in Asia.

Why did you have so many ERP systems? When you make 45 acquisitions and you have far-flung enterprises across the world, you have brought with those acquisitions some very talented and capable people and the systems they worked on. It's probably not prudent to start by wiping everything out. But over time, there's a relentless pressure [to improve profit margins]. Part of the solution is more and more efficient operations.

What hardware and software defines your IT infrastructure? IBM and HP are the backbone of what we do. On the software side, we had implemented SAP in Europe. We got in very, very early, so it was a very steep learning curve and development process for us. That curve has smoothed itself out quite nicely now so that we're deploying SAP in Asia. We have a homegrown system here in the U.S., and there is part of Europe that has a homegrown system.

We use SAP for finance, for example; we use the SAP HR module. We're using their global trading system for export compliance. Our architecture allows us to bring in the best in a category and marry it up with the rest of the applications.

What major projects have you worked on? We had about 750 servers [when I arrived]. The average utilization of those was somewhere between 10% and 15%. We did a server consolidation, and today we have about half as many servers that are far more efficiently utilized.

What technologies did you use to do that? It's an evolving process. We had enough servers. The connectivity of those servers is something we tried to be smart about. But there is a whole series of steps going forward that will get us to a true shared-service kind of environment. I'm very interested in the grid concept.

Step 1 was to reduce the number of servers, put more applications on a box. Step 2 is optimizing the boxes to make sure we don't have vulnerability points. Step 3, which is yet to come, is something that will look like a grid of systems in which multiple systems could pick up the slack when one system fails or is overloaded.

Are there other initiatives besides grid that you're excited about? I think that that which makes it simpler for the user makes it more productive for everybody. I want an environment where everything that faces the user is Web-like and intuitive. I just got back from a seminar [that] IBM put on, and I heard a lot about blogs. What I was interested in was the communication methodology using the Internet and how that applies internally in the business. **54448**

KAMINS CONTINUES

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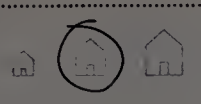
SIZE OF BUSINESS 

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Protecting Consumer Data on the Cheap

A mandate to protect individuals' personal data in the agency's databases isn't accompanied by any extra funds. By C.J. Kelly

SECURITY MANAGER'S JOURNAL

IN MY LAST COLUMN [QuickLink 53861], I discussed how I was called upon to do a fiscal-impact analysis of a privacy bill that was going before our state legislature. The bill is expected to pass soon and become law. And when that happens, state agencies like the one I work in, as well as private businesses, will be held accountable for any disclosures of individuals' personal information.

Despite my conclusion that complying with this law would require several hundred thousand dollars for just my agency, we and other state agencies might not receive any additional funds to comply with the mandate. So how do I go about protecting all the personal information that resides in our databases and servers and traverses our network?

No single hardware device or software application will be adequate. My best option is to use open-source tools and existing hardware to configure and install an intrusion-detection system. The IDS will let us monitor network intrusions and attacks and investigate the possibility of data such as Social Security numbers leaving or traversing our network in plain text. At least it's a start.

Do-It-Herself

In all my previous, private-sector jobs, I managed the people who configured and installed such systems. Although I have analyzed the data from these systems, correlated the information with output from other sources, given direction to staff and approved plans related to the placement of network taps, network monitoring appliances, firewalls, VPN concentrators and other security devices, I have never built such a device with my bare hands and put it into production. I am unaware of anyone within the state system who has walked down this path before. But that could be a case of the right hand not knowing what the left hand is doing; state agencies are fairly autonomous, and while efforts are currently under way to improve collaboration and the pooling of talent in the security arena, there doesn't appear to be a strategic plan. So people like me just muddle along, trying to do the right thing.

I'm a bit hesitant. Can I do this? To master the software I have selected — Red Hat Inc.'s Fedora Core 3, Snort, MySQL and BASE, as well as Apache, SSL and PHP — I will have to rely on my little-used *nix (Unix and Linux) skills, as well as white papers and how-to articles written by those much more experienced than me in the nuts and bolts of all this. I can also consult newsgroups and call on many friends and colleagues. And I know that help will be readily available from the open-source community, perhaps the most collaborative group of people on the planet.

> **I have never built such a device with my bare hands and put it into production.**

For those of you unfamiliar with these particular pieces of software, here's a short primer: Fedora Core 3 is Red Hat's free distribution of Linux. Snort can be described as a lightweight network IDS capable of performing real-time traffic analysis and packet logging for IP networks. ("Real-time traffic analysis" is a bit of a misnomer. The type of IDS I intend to build is a passive system; it will watch network traffic and be able to send alerts when rules are violated, but it will depend on a human being to watch for the alerts and react accordingly. In contrast, an intrusion-prevention system sits in-line and either passes or denies traffic based on a configurable rule set.)

Snort can also perform protocol analysis and content searching/matching, and it can be used to detect a variety of attacks and probes, such as buffer overflows, stealth port scans, Common Gateway Interface attacks, Server Message Block probes and operating system fingerprinting attempts. It uses a rules-based language to describe the traffic that it should be collecting, and it has a real-time alerting capability.

MySQL is a multiuser, multithreaded SQL database server that comes bundled with Fedora.

PHP, a widely used general-purpose scripting language that's well suited for Web development, and Apache Web server software (utilizing SSL — Secure Sockets Layer — for security) are available with Fedora Core 3.

BASE, for Basic Analysis and Security Engine, is based on the Analysis Console for Intrusion Databases (ACID) project code and is now recommended as a replacement for ACID. This application provides a Web front end to query and analyze the alerts coming from the Snort IDS system.

Once I decided on the software, I had to find hardware capable of running it and performing the network monitoring and analysis. I had to take what I could get, though. I found a Dell desktop that wasn't in use. It had an 80GB hard drive, 256MB of RAM, a Gigabit Ethernet network card and a 1.6-GHz CPU. From what I have read, this should be adequate, but there's no way of knowing until the system is tested in real time.

I decided to concern myself only with intrusion monitoring for headquarters and not the branch offices, simplifying the number and placement of sensors. I had already requested that a span (mirrored) port be configured on the primary switch, and I tested it using Ethereal packet analysis software. I know this isn't the perfect scenario, but again, it's a start and better than nothing.

Before beginning the software installations, I looked for a how-to guide (instead of my usual approach, which involves installing software, making mistakes, reinstalling and so forth). The fellow who wrote the guide, Patrick Harper, will surely hear from me, since he states that his document is for the "Linux newbie, as well the Snort newbie." I will let you know how this turns out in a couple of weeks, and I challenge any interested security managers to do this with me — all by yourselves. Don't let the engineers have all the fun.

WHAT DO YOU THINK?

This week's journal is written by a real security manager, "C.J. Kelly," whose name and employer have been disguised for obvious reasons. Contact her at mscjkelly@yahoo.com, or join the discussion in our forum: **QuickLink a1590**

To find a complete archive of our Security Manager's Journals, go online to: **computerworld.com/secjournal**

SECURITY LOG

DDoS Protection Being Guaranteed

Counterpane Internet Security Inc. says that its partnership with Prolexic Technologies Inc. allows it to offer service-level agreements guaranteeing protection against multigigabit distributed denial-of-service attacks. Counterpane has added Prolexic's intrusion-prevention services to its recently released Enterprise Protection Suite 2.0.

New Tool for Data Monitoring

Vericept Corp. announced its Vericept 7.1 adaptive control platform, which it says allows administrators to make exceptions to the general monitoring rules and define who, what and when monitoring occurs. It also makes it possible to monitor categories according to the time of day and day of week and automates the routing of events so that captured data can be assigned and routed to specified individuals.

Freeware Targets Web Site Security

NT Objectives Inc. released two freeware tools. NTOinsight 2.0 scans Web sites and analyzes site content, architecture and external interdependencies so users can visualize site exposure and attack vectors. NTOweb is a plug-in to NTOinsight that works with the Nikto database to detect over 3,100 Web server vulnerabilities.

VoIP Security Workshop in D.C.

The Cyber Security Industry Alliance is hosting a workshop in Washington on June 1-2 on securing voice-over-IP installations. Topics include VoIP security deployment, VoIP security requirements and 1996 Telecommunications Act reform. You can register at *http://pfidc.com/voip*. The workshop is free for government employees and $195 for all others.

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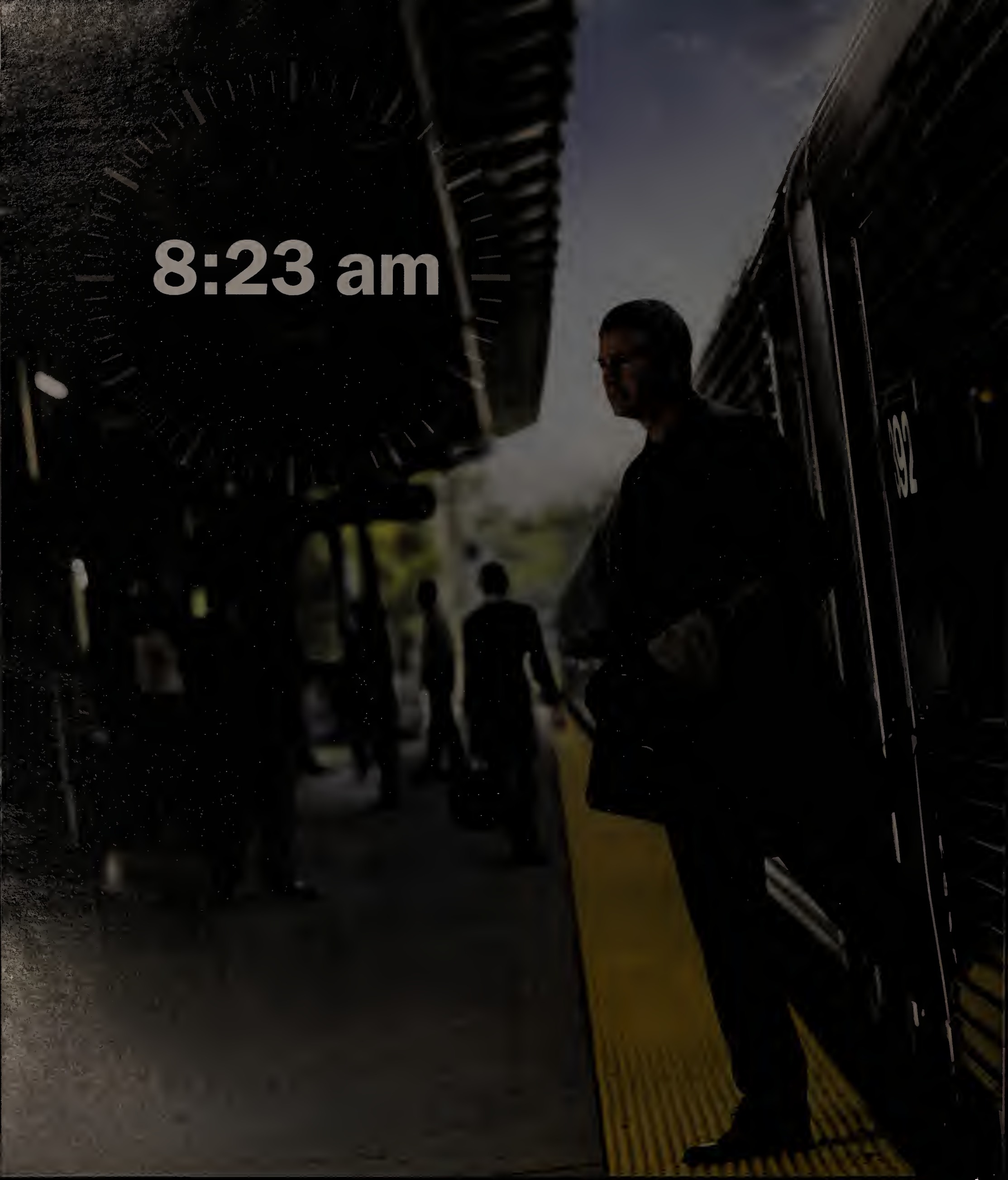
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FUTURE WATCH

Businesses and customers will share these ears and eyes. **BY LINDA ROSENCRANCE**

Anatole Gershman

TITLE: Global director of research

COMPANY: Accenture Technology Laboratories, the Chicago-based technology research and development unit of Accenture Ltd.

Q&A

Gershman spoke recently with *Computerworld* about Accenture's vision for the future of technology, which includes interactive grocery carts and the ability for your wardrobe to communicate with stores.

What are the three main trends that will be driving business applications over the next three to five years? If you look three to five years out, the underlying technology trends that . . . will continue to drive innovation are:

1. The rise of intelligent sensor networks.

2. The rise of scalable intelligence techniques — all the techniques that can analyze the data that is coming from all the sensors and could lead to useful business insight.

3. The rise of technology that enables you to be and act "there" from a distance and cope with lots of information, and it will be driven by pixels. We're going to have very inexpensive pixels everywhere — we see it in cell phones.

Those are technologies that enable us to sense — intelligent sensor networks; to think — technologies that enable our systems to think, which is scalable intelligence; and technologies that enable us to act on all this intelligence.

What are the business applications of these trends? Our vision of the business implications of these trends is what we call Reality Online — a connection between the physical world and the world that is reflected in our systems, so now technology will enable us to connect to physical realities and see them in real time, and for them to be reflected in our systems in real time so we can act on them in real time. I think Reality Online is going to revolutionize relationships between customers and enterprises.

How will Reality Online do that? Let's take an example of shopping for groceries. Supermarkets already collect a lot of information about their customers, using loyalty cards and checkout information, but they don't do much with that information today. And the customers don't get much benefit from this information.

Although some supermarkets are already experimenting with smart shopping carts, they don't do much with them except to show customers some advertising and, in some stores, customers can use those carts as self-checkouts. A smart shopping cart is a cart with a little screen attached to it and with a wireless connection so with that cart, the supermarkets can actually communicate with a customer in real time.

Accenture built a prototype . . . that creates a model of a particular customer, say, Mrs. Jones, so we can create an exact model of Mrs. Jones with her exact shopping habits — what did Mrs. Jones buy, when did she buy it?

We can use this model to predict exactly what Mrs. Jones is likely to need, or want, in Aisle 3 of the supermarket on Tuesday afternoon. So with the smart cart, we can actually say something intelligent to Mrs. Jones, like reminding her about what she would buy in her normal buying cycle in a particular location of the supermarket, because shoppers typically forget to buy between 10% and 12% of what they should be buying.

And that's real money to the bottom line of a supermarket, and that's convenience for Mrs. Jones. This is what we call experiential technologies, or experience technologies — technologies that enable us to act right there where Mrs. Jones needs that action, right there in Aisle 3.

Can you take that idea a little further? If we take this a little bit further into the future, we can imagine that a lot of clothing that we buy is going to have RFID tags. You can zap these tags out of existence at [the checkout] counter, but if you keep them activated, then you can access some interesting services through what we call an Online Wardrobe, which uses sensors, tagging and tracking technologies.

With the Online Wardrobe, consumers can selectively reveal the contents of their wardrobe to their favorite merchants. In return, they receive personalized offerings and timely reminders about products of interest. And since the wardrobe is in the consumers' homes, businesses can more easily deliver products and services to where their customers live, rather than having to lure them to their stores or Web sites to make a sale.

Say, for example, you buy a jacket and you take it home, and your closet reads the tag and knows you bought a new jacket, and it can suggest what goes with it that you could purchase from an online store. The Online Wardrobe brings services to the point of need — you can buy clothing through a connected closet.

How will camera phones enhance the relationship between businesses and customers? Today, people use phones to tell something to businesses, but with the proliferation of camera phones, people want to show something to businesses. Say I see a chair I like. I can take a photo of it and send it to a furniture store and ask if they have a chair like that.

Technically, people can take snapshots today, and they can e-mail snapshots today, but if customers want to do this, businesses have to create media-enabled call centers with the technology to handle that kind of incoming media in a scalable fashion. This will take some time — remember, it took many, many years to move from simple telephone service to call centers. I think it will move much faster than that, but I think it will take some time because it requires a change in the way businesses think about their customers. 54120

The Online Wardrobe uses sensors, tagging and tracking technologies to keep track of the clothing you already own and helps you buy coordinating items, either online or in physical stores.

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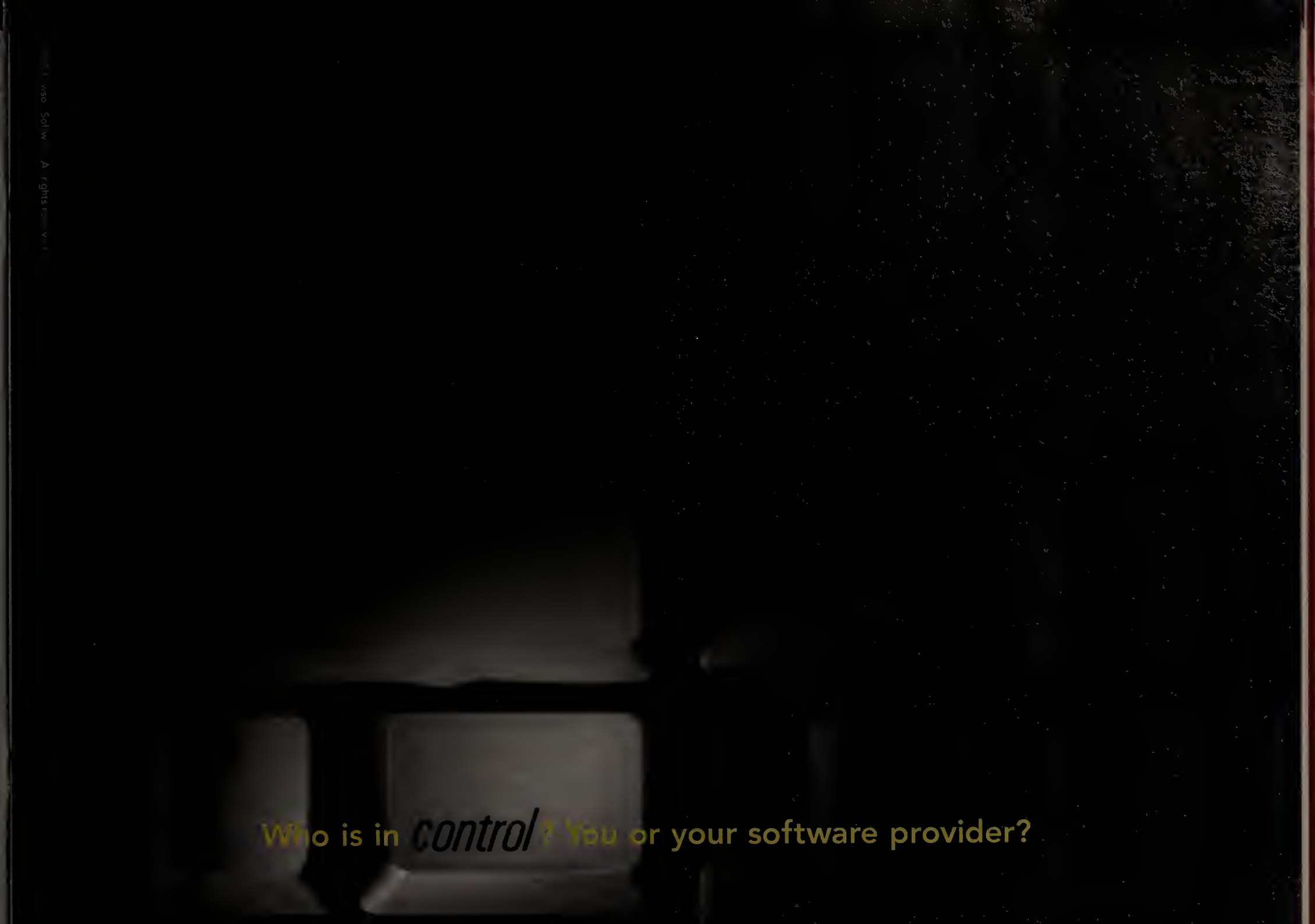

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BRIEFS

Compuware Ships Governance System

■ Compuware Corp. has begun shipping Changepoint 10, an integrated IT governance and IT management system. The software is designed to provide enhanced visibility across applications, IT infrastructure systems and project portfolios, according to the Detroit-based company. New functionality includes the ability to identify applications that might be affected by systems being developed, plus configurable workflow capabilities that enable IT managers to identify a project's status. Prices for the Windows-based product range from $400 to $2,000 per named user.

Elemental Upgrades Compliance System

■ Elemental Security Inc. in San Mateo, Calif., announced the latest version of its Elemental Compliance System. The new version offers increased platform coverage, including agent support for Windows 2000 desktops, Windows 2000 and Windows 2003 servers, and Red Hat Enterprise Linux 3.0. It also has a deeper policy library that includes templates for Sarbanes-Oxley Act compliance and additional Windows applications, the vendor said. New automated remediation of host and application configuration policies, additional reports and support for Active Directory integration are also included. Pricing starts at $100,000.

Oracle, Zend Agree On Integration Link

■ Oracle Corp. and Zend Technologies Inc. in Cupertino, Calif., announced new integration between Oracle's database and Zend's PHP open-source scripting language for developing Web applications. The companies plan to deliver a free download in the third quarter called Zend Core for Oracle, which will allow developers to deliver PHP applications that are tightly integrated with Oracle's database.

JIAN ZHEN

Know Your Options

TECHNOLOGY PRODUCTS are generally implemented either as appliances or as software applications. It's vital for companies to understand the differences in cost, performance, security, installation, maintenance and support for these two different approaches as they make buying decisions.

Software vendors typically offer customers only the products they sell. Each product is often just a small piece of the larger puzzle of implementing a complex technology system. The customer is left with the burden of supplying all of the other components, such as hardware, databases and storage. Each of these components can add a significant amount to the total cost.

JIAN ZHEN, CISM, CISSP, is a freelance writer in the San Francisco Bay Area. He has been in the information security industry for nine years. He can be reached at zhenjl@gmail.com.

In contrast, appliance-based systems usually come as stand-alone, dedicated machines that may not require additional hardware and software. They may, however, have specialized ASICs or hardware built in, and they may have higher initial costs. And many customers may not want extra hardware in their data centers, and they may be able to reuse existing servers, databases and storage.

Appliance-based products are designed for only one standard platform, whereas software-based systems must support hundreds of combinations of hardware and software.

Appliances can be implemented based on the knowledge of the underlying hardware. This gives the customer tremendous leverage in the performance optimization process. Appliance vendors typically provide only a few choices of hardware platforms, but if it gives the customer the ability to acquire high-performance hardware, sometimes it is a better way to go.

The life expectancy of a default installation of Linux — meaning the time it takes for the host to be compromised — is approximately three days. For default installations of Windows operating systems, it's much shorter, usually minutes.

For this reason, appliance vendors usually take special precautions to equip their products with minimum configurations that feature only essential tools and utilities. They may also harden the operating system to allow only authorized access.

In contrast, software is generally installed on the customer's own servers. And the burden of securing these servers falls on the customer. Software may be an option for organizations that have standardized security hardening policies and whose employees have security expertise. For other environments, an already hardened appliance might be the better choice.

In a complex technology acquisition, the installation and configuration is often the most time-consuming phase of the project. Appliance-based technologies are designed to spare users the pain of selecting hardware, installing an operating system, keeping patches up to date and handling general system administration tasks.

Software products, on the other hand, require a complex installation process that includes these steps: obtain and qualify the server; ensure that the server's operating system is updated to the revision level supported by the product; update the server with security patches; load the software on databases, the Web server and the application server; and configure the applications to work with the database and back-end systems. This can take weeks, if not months, to complete.

However, the road to implementation of an appliance can also be extremely long if the product comes with a nonstandard operating system or software that corporate security policies do not allow.

With a minimum operating system installation, appliances are usually not threatened by security vulnerabilities. The appliance vendors also pick up the responsibilities of monitoring and identifying required patches.

In the case of software purchases, the customers provide the servers and must monitor and identify any patches that may affect their environments. However, many customers are already doing that to support the rest of their IT infrastructures.

Appliances are integrated hardware and software systems designed to work together. And appliance vendors are responsible for supporting everything, including the hardware, operating system and application, providing a single point of contact when a question or problem arises.

With software, the customer is left with the burden of determining which hardware component, operating system or application is at fault when a problem arises. This means the customer, not the vendor, must manage the problem, which may increase the time it takes to repair things.

In any product selection process, you must explore your choices in light of your current resources and your corporate security policy. Those steps will lead to a much more informed and thorough analysis of the real cost of buying a technology product. **54476**

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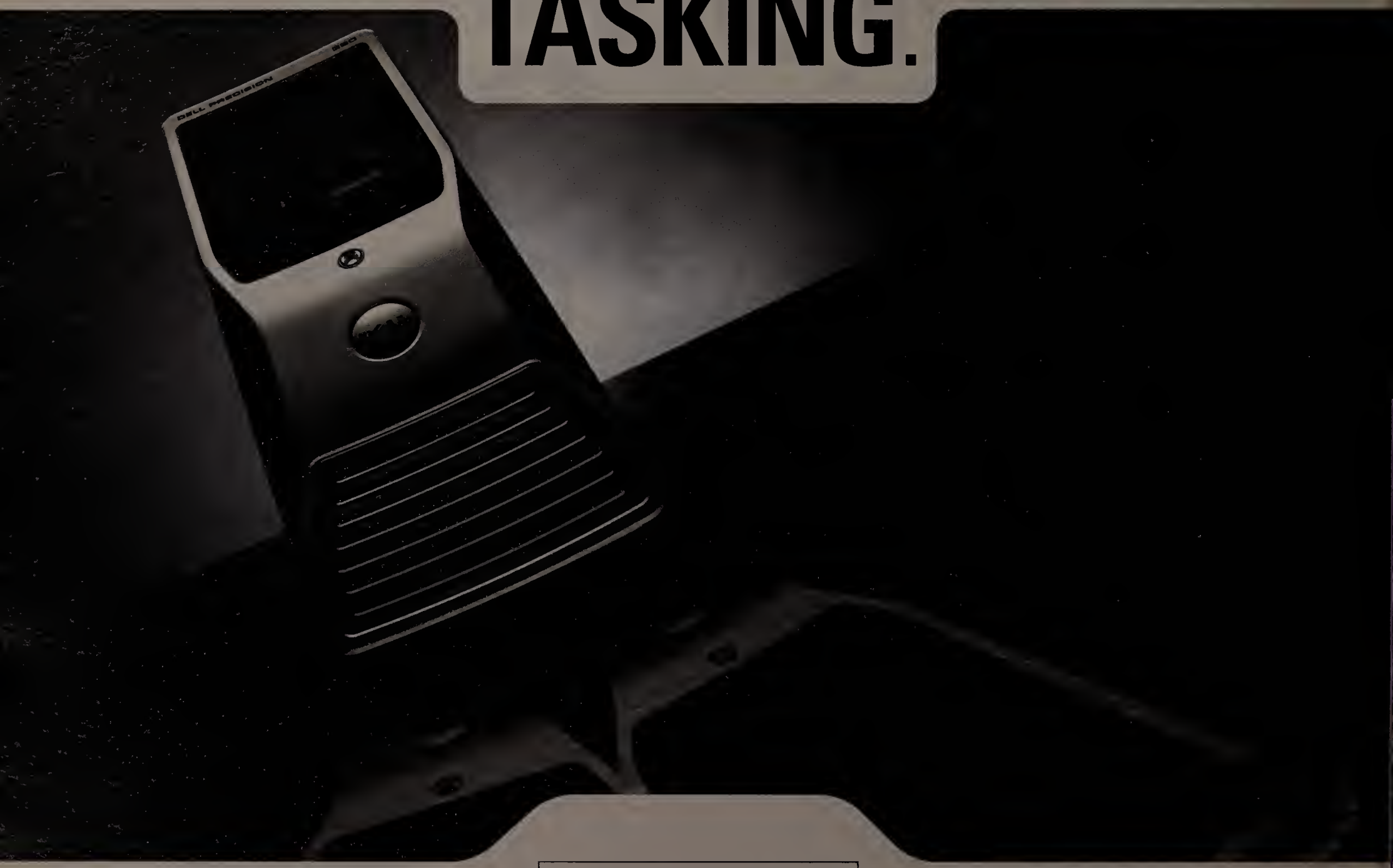

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Good vendor relationships — and superior service — don't happen by accident. Here's how our Premier 100 leaders get their IT vendors to notch up their performance. **Page 42**

Career Watch

Sherry Aaholm of FedEx answers readers' questions about jobs and careers; and a new book explains how to hang on to your company's "deep smarts." **Page 48**

OPINION

Chain of Command: IT and the CEO

It's critical for the CIO to report to the CEO, says former Ace Hardware CIO Paul Ingevaldson. Here are eight reasons why. **Page 50**

Grooming the Next Generation

Smart IT leaders take succession planning seriously. By Thomas Hoffman

UNTIL RECENTLY, many CIOs hadn't given much thought to succession planning, thanks largely to a weak economy and low staff turnover.

"People were lulled into a sense of complacency over the last five years, as there hadn't been much job movement," says Bill Homa, CIO at Hannaford Brothers Co., a Scarborough, Maine-based grocer.

But that's starting to change. The economy is gaining strength, and turnover is edging up. More important, many CIOs are recognizing that they need to actively develop the next generation of IT managers and technical leaders as thousands of experienced baby boomer IT professionals near retirement age and U.S. colleges and universities churn out fewer computer science graduates.

"Ten years from now, we're going to be facing a big gap" in supply and demand for IT management and technical skills, says Maria Schafer, an analyst at Gartner Inc.

Senior management at most U.S. companies has done a poor job of succession planning — not only within the IT ranks but throughout most corporate departments such as finance, customer service and human resources, says Schafer. "We just don't think in long-term horizons in the U.S. as they do in Japan and Germany," she adds.

Still, some forward-thinking companies, like General Electric Co., have had succession management programs for years. "We place succession planning as an integral part of our leadership development process," says Chris Perretta, vice president and CIO at GE Commercial Finance in Stamford, Conn.

Under a formal review process that's done for all GE employees each spring, managers conduct an exercise known internally as "Succession C," in which a rigorous, written succession plan is put together for each worker, says Perretta.

GE Commercial Finance has a succession plan for each of its 1,200 IT workers, he adds. At the CIO level, Perretta and other executives are

Continued on page 41

MARCOS CHIN

Don't Miss Your Chance!

COMPUTERWORLD PREMIER 100 IT LEADERS 2006

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Continued from page 39

constantly assessing IT directors and other potential candidates for attributes such as curiosity, business focus and high energy levels. To help develop its next set of IT and other corporate leaders, GE developed a short-term international rotation program more than 10 years ago to move workers among various geographic locations in order to give them "tangible international experience," says Hank Zupnick, CIO at GE Commercial Finance Real Estate, a division of GE Commercial Finance, also in Stamford.

Detroit-based DTE Energy Co. launched a corporate succession-planning effort three years ago. The program was started following an executive repositioning in the wake of DTE's merger with MCN Energy Group Inc. and an early-retirement program that was more popular than expected, says Lynne Ellyn, senior vice president and CIO at the diversified energy company. As part of the effort within DTE Energy's 800-person IT department, Ellyn and other executives regularly review positions that are critical to the ongoing operations of the business, ensuring that there's a "farm club" of talented IT professionals to fill critical positions as needed, she says.

Ellyn also has "a very detailed succession plan" for her own role. She has identified several IT directors as candidates to replace her — a list that has been reviewed by DTE Energy's executive committee "so that it's well known," she adds.

Real-World Testing

Dan Demeter, Korn/Ferry International's CIO, looks for ways to try out his succession scenarios. "When I go on vacation, I put different people in charge," says Demeter, who manages a 60-person IT staff at the Los Angeles-based executive placement firm.

At other times, Demeter distributes his responsibilities among various IT directors and grants executive authority to one person. All this helps ensure that his management team will be ready to step in when needed.

For some IT managers, succession management within the IT organization isn't strictly a hierarchical exercise. For instance, when Marriott International Inc. considers candidates for an opening within its 1,200-person information resources department, "we look across the organization, not necessarily down and up," says George Hall, senior vice president of human resources for the IT group at the Bethesda, Md.-based hotel operator. By looking only vertically through the organization for the right person, he says, "you may be limiting your resources as to who may be the most effective person to step into that role."

Because some technicians want to take on leadership roles within their domains without having to become managers, Marriott has put together a leadership track and a technology track for its IT organization. People in the technology track can grow into a number of roles that lead up to the vice president level in terms of compensation, says Hall.

Like GE, Marriott also offers rotational assignments for IT and business workers alike. For example, one of its senior IT managers recently moved into a corporate HR role while a member of the finance department transferred to the IT department to work on financial applications, Hall says.

In addition to rotating IT and business personnel, Hannaford Brothers' Homa says he likes to place people in roles "outside their comfort zones" to help them grow professionally.

For instance, the person who had been overseeing the grocer's Windows NT operating system group wanted to develop more managerial experience. So Homa recently placed him in charge of the company's IT support center, where he'll be managing more personnel and responding "to a lot more problems," says Homa.

Truman Medical Centers Inc. recently launched a leadership pipeline program to identify people who are ready to move into roles with greater responsibilities. In addition to handling their usual work, the 11 people who were selected have each been paired with an executive mentor and have been asked to oversee a strategic project that was hand-picked for them by the company's CEO, says CIO Bill McQuiston.

The Kansas City, Mo.-based health care provider has also established leadership programs to identify "raw talent" in the organization and to help existing leaders address deficits in skills such as communication or presentation that might keep them from cracking the executive ranks, says McQuiston.

Harder Than It Looks

As essential as IT succession planning is, it's also fraught with challenges. The first concerns the demands of technology itself. For example, DTE Energy needs IT workers who have a deep understanding of a particular technology, says Ellyn. But that focus can leave someone "inadequately equipped to move horizontally or in other areas" where interpersonal, business and other soft skills are needed, she says.

Another challenge is retaining people who have been groomed to move ahead. As companies invest in training and developing IT workers, they're also making them more marketable. One of the biggest challenges that Marriott faces is low turnover at the senior management level, which can hinder emerging leaders from moving up quickly, says Hall.

CIOs also have to gain a better understanding of what makes younger IT workers tick. In the past, "when people died off or moved on, you advanced," says McQuiston. Now, he says, "people are looking for a better road map" for their careers. **54219**

Successful Succession

Gwen Walsh, a senior consultant at Ouellette & Associates Consulting Inc., offers these succession-planning tips:

Do identify roles and responsibilities critical to attaining strategic and tactical business goals.

Do define the critical success factors and optimal profile for each position, including knowledge, experience, certifications, competencies and skills.

Do determine whether there's a logical progression path that can be defined for each target position.

Do assess those currently in key positions, comparing their profiles with desired profiles and noting gaps.

Do identify those who aren't currently holding key positions but who have high potential.

Do work with high-potential candidates to create and execute a professional development plan, then track their progress and results.

Do create a matrix of key positions, success factors, profiles, incumbents and heirs apparent, including strengths, challenges and anticipated timing to reach each desired profile.

Do note key positions where there's no heir apparent and determine your immediate, short-term and long-term strategies should that key position become vacant tomorrow.

Do be certain that you have identified your own replacement.

Do make leadership succession planning a dynamic process. Leverage it as you hire new talent, plan future strategies, look for resources in emergency situations and raise the performance bar.

Don't limit your thinking to formal leadership positions; informal leaders may be critical to your business.

Don't limit your analysis to fit the profile of the person currently holding the position.

Don't neglect to share the progression paths and let each person in your organization know where he fits into the big picture.

Don't hesitate to grow your current leaders to optimize today's contributions and results.

Don't overlook a diamond in the rough.

Don't miss the opportunity to find next-generation leaders within your organization.

Don't keep all of the information in your head; document it.

Don't assume that the unexpected happens only to other people.

Don't limit your heir apparent to those on your team. Think outside the box; think diversity.

Don't create the plan as a one-time event and allow it to grow stale and outdated.

100 PREMIER [SPOTLIGHT]

Ten tips to help you get the best performance from your IT vendors.

By Mary Brandel

Raise the Bar

MANAGING technology vendors used to be an invisible job that somehow just got done. But with more-complex IT offerings, increasingly complicated negotiations and the budgetary imperative to get the best deal, companies are formalizing the vendor management function with standard processes, centralized administration

and firm opinions as to what does and doesn't work.

The change can be seen among *Computerworld*'s Premier 100 IT Leaders, some of whom agreed to share best practices. Here are their tips on managing your hardware, software and services vendors.

1 Remove IT from the contract business.

"The last thing you want is IT negotiating with vendors," says David Rice, CIO at Siemens Medical Solutions Inc. in Malvern, Pa. "It can get very confusing and make negotiations unwieldy."

Take the contract negotiation process away from IT and leave it to the experts. The rewards: efficiency, purchasing power and increasingly experienced negotiators.

Many companies have established vendor management offices (VMO) to handle vendor relationship management, negotiations and contract cost containment [QuickLink 52017]. When you've got a VMO, IT has to learn to butt out.

"When we're working on a deal, we communicate within the organization that only certain people should be discussing it with the vendor," says Rick Omartian, IT chief financial officer at The Guardian Life Insurance Company of America in New York, which has established a VMO. E-mail reminders warn IT workers not to talk with any salesperson, lest an innocent remark reveal pricing details on competitive contracts or internal deadlines and pressures.

But not all successful vendor management happens through a VMO. At Regions Financial Corp. in Birmingham, Ala., each vendor relationship is managed by the IT manager who most often uses that vendor's products or services. The procurement group heads up negotiations, however, while the legal department handles the contracting process, according to CIO John Dick.

2 Aggregate purchasing power.

Centralizing contract negotiations can also help aggregate technology purchases and leverage your purchasing power, says Dick. Regions Financial strives to be among its vendors' top 10 customers in terms of sales volume, in hopes of maximizing the business relationship and getting deeper discounts. "It's real important to position your purchasing power at the sweet spot of the vendor," Dick says.

Being a key customer has other potential rewards, including reciprocal business, he adds. For example, Regions Financial encourages its top technology providers to purchase its banking services.

BENCHMARKING RESOURCES

The Benchmarking Network Inc.
www.well.com/user/benchmar

BenchmarkPortal
www.benchmarkportal.com

Saratoga Institute
www.pwcservices.com/saratoga-institute

American Society For Quality
www.asq.org

3 Don't get cozy.

No matter how strong the relationship is between your company and your vendor, always keep an eye out for other deals.

A case in point: Until recently, Guardian was using a single vendor for its telecommunications services. Then it conducted a full-blown request for proposals and ended up choosing two other vendors that now compete for its business, resulting in a 35% cost reduction, Omartian says. Now, "all vendors have to win our business on every deal," he says.

Guardian ensures that no relationship gets too cozy. "When we spend a certain amount of money with one particular vendor, we need to substantiate why we went with that one versus another," says Shelley McIntyre, vice president of business technology services.

Finding a better deal doesn't always mean changing vendors. Sometimes it just means lighting a fire under a partner. At MasterCard International Inc., Jim Hull, vice president of engineering services, checked out competitive offerings and found that one of his current telecom vendors had overpriced a bid by 100%. "We went back to our partner and said, 'You're in danger of losing this business,' " he says. "And guess what? They matched" a competitor's bid.

Now MasterCard takes pains to keep everybody honest. For example, one vendor had previously dominated its storage business, but MasterCard recently added a second vendor to the mix. "Even though you have a great relationship and they have a great product, how do you know you're getting a good deal?" Hull asks.

4 Benchmark the industry.

Industry benchmarking is an important tool for getting a fair deal. Contracts should always have benchmarking clauses to ensure that the service and pricing you receive stays competitive; this is particularly important in long-term service contracts, says Frank Enfanto, vice president of health care services systems delivery at Blue Cross and Blue Shield of Massachusetts Inc. in Boston. "Ten years ago, things were more costly on a per-unit basis than now," he explains. The benchmarking clause should specify the review process and who needs to be involved.

You can also get pricing trend information from vendors that solicit you for business. "We get an idea of what their pricing is and renegotiate rates [with current suppliers] if we see a downward trend," McIntyre says.

5 Don't beat up the vendor on price.

There's a caveat to all this talk about price. Sometimes, getting the lowest price is a harbinger of poor quality. Shoot for a mutually good deal. "This idea that I'm going to squeeze the vendor to get every cent — that's not good business," Rice says. "If it's too sweet a deal on either side, it comes back to bite you later." The relationship can turn adversarial, the supplier may become less responsive to issues you raise, and quality can suffer.

6 Evaluate, evaluate, evaluate.

Evaluate vendor performance using standardized procedures on a weekly, monthly, semiannual or annual basis, depending on the type of relationship. Guardian, for instance, uses 12 categories to rate its hardware and software vendors semiannually, including presales, postsales, cost-effectiveness, technology leadership, financial strength, cost savings and flexibility.

Siemens meets with outsourcers weekly to review call volumes, mean response time and other metrics. "You have to bird-dog it," Rice says.

Evaluation metrics allow you to catch problems early and be open with the vendor about resolving them. "I've seen people rant and rave about poor service and then not follow through," Dick says. "Vendors need to understand your willingness to escalate to the highest levels in the company and do it rapidly."

Continued on page 45

Worst Practices

IT vendor relationships are challenging in general, but relationships with outsourcers are the most challenging of all.

According to a white paper by Technology & Business Integrators, a consulting firm in Ramsey, N.J., there are some very wrong things to do when considering outsourcing IT functions. Here are TBI's outsourcing no-nos.

- **Don't rely on a handshake or ignore your due diligence.**
- **Don't second-guess the decision to outsource. That will undermine working relationships.**
- **Don't rely on a vendor for business advice, strategic advice or thought leadership in emerging technologies, unless that's specifically the service it is contracted to provide.**
- **Don't assume that saving money will be the overriding benefit.**
- **Don't be complacent if you notice significant personnel change at the vendor.**
- **Don't outsource a problem. That will just make it an externally sourced problem.**

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Continued from page 43

7 Apply peer pressure.

Regions Financial sometimes uses peer pressure to resolve vendor service issues. For example, it had a problem with its older ATMs, which were achieving only a 95% availability rate compared with a 98% industry average. The ATM vendor suggested that Regions purchase all new ATMs — a multimillion-dollar investment. Instead, after a week of exceptionally long outages, Dick began monthly meetings with all of the ATM service and equipment providers, as well as the internal IT people. Everyone was required to detail problems, resolutions, costs and avoidance measures. "There were 40 people in the room, and we used peer pressure to make them accountable for their performance," Dick says.

The result: "We went from several hundred extended outages to less than 15 a month," he says. The company's 1,400 ATMs now have an availability rate of 98.6%.

When MasterCard recently encountered a problem restoring backup data, it called in its hardware, software, network and storage vendors. It turned out that the tape vendor had mistakenly sold faulty drives to MasterCard. "Until it proved it could fix the problem, we told them we wouldn't buy any more tape drives from them," Hull says. Not only did the vendor fix the problem, but today it's much more focused on meeting MasterCard's needs, he says.

8 Focus on security.

When Guardian created its VMO, it set up standard processes for its contracts, ensuring that terms were consistent across all relationships. When creating the contracts, the company decided to also nail down its security requirements. It created stricter intellectual property terms, for example, and required that contractors undergo background checks and that contracting firms carry a certain level of insurance. "If fraud is committed by one of their employees, we want to know they have insurance to cover that," Omartian explains.

A VENDOR MANAGEMENT PRIMER

To learn more about managing vendors, visit our Web site and read our special report on the topic:

QuickLink 52405
www.computerworld.com

9 Develop a list of preferred vendors.

Regions Financial maintains a strategic vendor management program for the dozen or so of its suppliers that it deems most important. The criteria for that designation include how much money Regions spends on the vendor's technology, the strategic nature of the products or services, and the commonality of the companies' technology visions, according to Dick. Regions develops special relationships with these vendors and expects higher delivery standards, shared technology investments and reciprocal business.

Frank Enfanto

Remember, not every vendor can be — or should be — strategic. You need to differentiate, Enfanto says. "You need to understand what type of relationship you want — strategic or just tactical," he explains. "In a true partnership, there's a lot of compromise on both sides. You might give up something on price but then get [more in] services." In a strategic relationship, he says, the vendor "is really concentrating on you. Your problems are their problems; your successes are their successes."

10 Use preterms.

The last place you want to get bogged down in vendor management is during contract review. "Once we make the decision to go with a certain vendor, we don't want to find out there's a major [contract] term that they won't agree to," Omartian says. Guardian uses preterm documents, which outline contract terms in business lingo rather than in legalese, and gives them to the handful of vendors that make the final cut during negotiations.

h M Intyr

The preterm phase has already proved useful. "There was one time that we'd narrowed it down to three finalists, and we couldn't get an agreement from one on the preterm," McIntyre says, "so we actually switched out a vendor." **54221**

Brandel is a contributing writer in Grand Rapids, Mich. You can contact her at mary.brandel@comcast.net.

Dillard's department stores hire over 10,000 people a year. Storing and retrieving application, training and benefits packets had become costly. So Dillard's bought into something smart: a Xerox Office Document Assessment (ODA).

Xerox examined their work process across all 14 Dillard's business units and recommended key improvements.

First, all analog copiers, stand-alone printers and fax machines were replaced by Xerox DocumentCentre® multifunction systems. Then Xerox DocuShare® was installed on Dillard's network.

This cross-platform document management system, along with Xerox imaging software, digitized key business processes.

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Career Watch

ASK A PREMIER 100 IT LEADER

Sherry A. Aaholm

TITLE: Senior vice president, express and freight solutions

COMPANY: FedEx Services, Memphis

Q&A

Aaholm is this month's guest Premier 100 IT Leader, answering questions about landing a job in IT and making the right career move. If you have a question for one of our Premier 100 IT Leaders, send it to askaleader@computerworld.com and watch for this column each month.

What options does an unemployed mainframe programmer/analyst with 30 years' experience have to regain employment, when outsourcing for mainframe, midrange and client/server is at an all-time high? You have two areas to explore. First, there are several large companies that do significant amounts of development work within their own IT organizations and utilize offshore partners to help supplement development, and there are large companies that do all of their development work in-house. Only in the past few years have companies once again started hiring IT resources instead of holding head count static. Researching those companies that pursue this strategy might offer employment options.

The second and potentially more advantageous way to approach this is to take your 30 years of experience and outline how you could use it to assist those companies that use offshore partners. One of the challenges companies face when using offshore partners is having solid processes in place to manage the relationship and make it a win for both the company and the partner. So leveraging your 30 years to support this is an avenue to consider.

I have 10 years of experience in IT, with a master's degree in computer science, an executive MBA from a top school and certifications such as PMP, CISA and CISM. I am currently working as a project manager. Can you offer a suggestion regarding a next step in my career where I can leverage all of the above? Focus on how you can apply these skills to business analysis. Make the link between business and IT, help put technology in layman's terms and define how it can help drive business goals. Focus on how to leverage what you have learned in the past 10 years and how that applies to the industry you are targeting. Use that to your advantage to create a laser focus on the job you want. People who have the skills to bridge technology and business aren't necessarily common, and they add significant value to a company. 53927

Hanging On to Your Company's 'Deep Smarts'

Does your company have the deep smarts to be competitive? In their new book, *Deep Smarts: How to Cultivate and Transfer Enduring Business Wisdom* (Harvard Business School Press, 2005), Dorothy Leonard and Walter Swap argue that the most successful corporations rely on people who possess a knowledge that is drawn from "firsthand life experiences" and "shaped by beliefs and social forces" based primarily on know-how and "know-who." As the book's title suggests, the authors' main concern is helping organizations find ways to cultivate and transfer deep smarts so that knowledge can continue to benefit the organization after its original possessor has moved on.

Leonard and Swap say that deep smarts can be transferred from one management generation to another, but only with a concerted effort. Organizations must select employees with deep smarts and then let them devote a great deal of their time to coaching protégés. They use a learning process that the authors call "guided experience," which includes practice, observation, problem solving and experimentation.

– *Jamie Eckle*

Barriers in the Workforce

In a first-quarter survey of 168 human resource executives and users of "enterprise talent management" systems, Boston-based Aberdeen Group Inc. identified the following as the top concerns and challenges that companies face in creating a high-performing workforce:

Internal workforce career development, succession planning and mobility	60%
Insufficient talent in market	49%
Inability to predict or plan future workforce	43%
Inconsistency in hiring practices	40%
Inefficiencies in the hiring process	39%
Inability to compete for top talent	35%

Good News, Bad News About CIOs

In a survey of 496 senior executives around the world that asked which of various "emerging" C-level titles will be the most powerful this year, CIO came in second, behind chief marketing officer. What's most intriguing about this may be the fact that CIO and CTO were included on the list of emerging titles. Maybe in another 10 years or so . . .

Chief marketing officer	38%
Chief information officer	28%
Chief technology officer	26%
Chief knowledge officer	25%
Chief restructuring officer	24%
Chief talent officer	23%
Chief creative officer	12%
Other	8%

SOURCE: ASSOCIATION OF EXECUTIVE SEARCH CONSULTANTS, JANUARY/FEBRUARY 2005

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July 26, 2005 · 8:15am to Noon · Chicago, Illinois
The Four Seasons Chicago · 120 East Delaware Street · Chicago, IL

August 9, 2005 · 8:15am to Noon · New York, New York
New York Marriott Financial Center · 85 West Street · New York, NY

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Agenda Highlights

- **Industry Update from a Senior Computerworld Editor**
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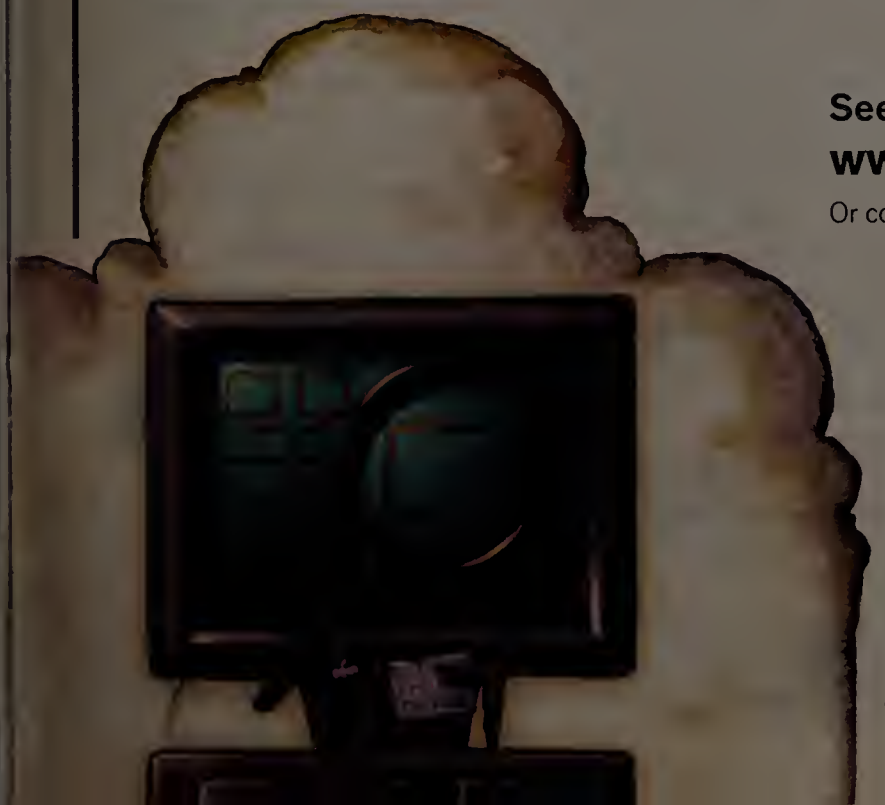
- **Customer Case Studies Showcasing Recognized IT Leaders' Experiences**
- **Panel Discussion on "Best Practices" and Enterprise Applications**
- **Peer-to-Peer Networking**



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QUICK HITS

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PAUL M. INGEVALDSON

Chain of Command: IT and the CEO

FOR MANY YEARS, IT has been trying to make the case that the CIO should report directly to the CEO. But surveys show that only about 40% of CIOs do so, and the proportion that report to the CFO is on the rise. I contend that this is happening because IT has failed to make the case for the importance of the direct reporting relationship. Here are eight reasons why the CIO should report to the CEO.

PAUL M. INGEVALDSON retired as CIO at Ace Hardware Corp. in 2004 after 40 years in the IT business. Contact him at ingepi@aol.com.

1. Today, most companies strategically differentiate themselves from their competitors through the use of IT systems. Since the CEO is the company's chief strategist, he must oversee and direct IT to ensure that it's involved in the most strategic issues on the table.

2. If IT reports to anyone other than the CEO, the technology agenda will be influenced by the objectives of that particular executive. It's imperative that IT develop the most critical business applications, not the ones favored by one senior executive.

3. Since strategic IT projects can have so much of an impact on the future of the company, it's essential that the CEO develop a working knowledge of the process of project creation. Lack of IT expertise is no excuse to delegate this. The CEO must immerse himself in this process to be sure that the company's strategy is being properly addressed.

4. Although the CFO's area of expertise may appear to be the most compatible with technology, I would argue that the CIO and CFO positions are polar opposites.

The CFO, by definition, is a risk-averse executive whose major responsibility is to protect the financial well-being of the company. His role is to question all major expenditures and assure that the proper controls are in place to maximize returns on investments. In publicly held companies in particular, the CFO's viewpoint is decidedly short term.

The CIO must be a risk taker. Every strategic system development project is risky, since it has never been done before in the company and will have a long-term impact. It's extremely difficult to predict costs and time frames, especially since the user department probably doesn't fully understand what it needs. And since most significant system developments span multiple years, the CIO must be more future-oriented than the CFO. He needs a long-term vision of the future benefits of new development.

Under a CFO, IT would operate more conservatively. Is a conservative IT department the weapon your company needs to confront the intense competitive environment?

5. The costs of IT continue to rise as departments across the company request more from it. Ironically, it's IT that must defend its rising budgets. If the CIO doesn't report to the CEO, the CEO won't understand that the IT budget is an investment in each department within the company.

6. If IT is indeed the strategic engine of the business, all parts of the company must be involved in setting its priorities. If IT reports to the CEO, all the other C-level executives will understand that.

7. The annual capital expense for IT is often the largest in the company. It's essential that the CEO understand how this IT capital compares to requests from other departments. The CIO needs to be on equal footing with other C-level executives as they present their requirements to the CEO.

8. The IT environment is a minefield of escalating costs, technological setbacks, inflated expectations, shortages of time and resources, and pressure to gain competitive advantage. These difficulties are exacerbated by the limited IT knowledge of most people in the business and the fact that the average CIO tenure is 18 to 36 months. If a company wants to maintain some sense of continuity within its IT ranks, it's critical that the CIO be a major "cabinet" member and have the ear of the CEO. Otherwise, the CIO will always be a convenient scapegoat when times get tough.

It's essential that the CIO report to the CEO. One of the most common impediments to this happening, however, is the CIO's inability to speak the language of business. When we become more business-oriented and give up geekspeak, the CEO will find our meetings worthwhile and will anticipate rather than dread them. **54216**

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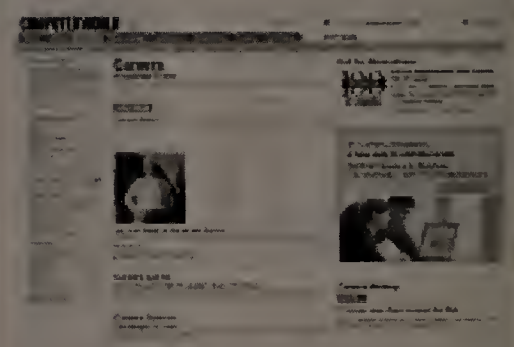

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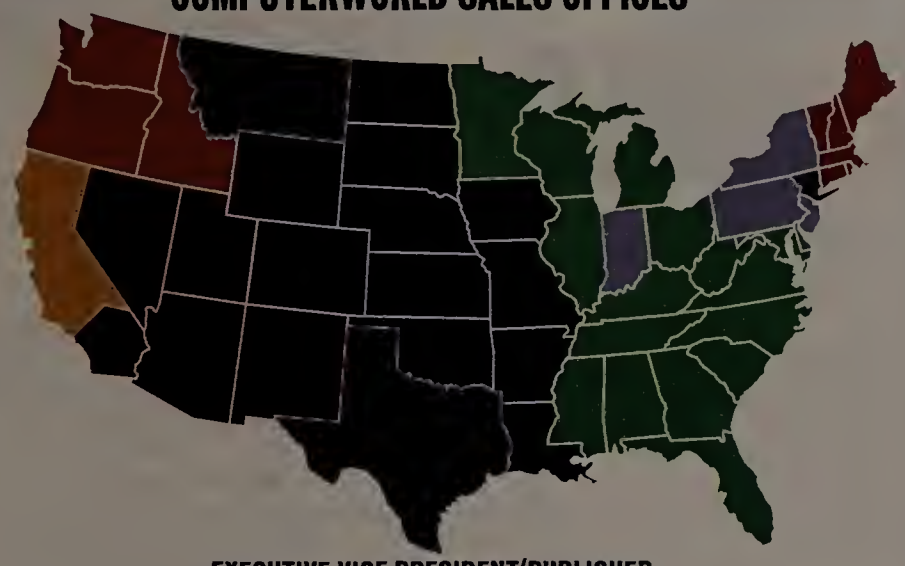

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Sears-CSC

CSC argued in its motions filed with the Court of Appeals — from which it unsuccessfully sought an injunction to stop Sears' move to cancel the contract for cause — that Sears terminated the agreement "for convenience due to change of control" as a result of the retailer's merger with Kmart Holding Corp. The merger, which formed a new parent company called Sears Holdings Corp., was announced in November and completed on March 24.

If Sears and Kmart had completed their merger and canceled the contract by March 2, the fee for a convenience termination would have been about $58 million, El Segundo, Calif.-based CSC said. It noted that the fee increased to $96 million if the termination notice came within 90 days of June 1, the one-year anniversary of the contract signing date.

According to CSC, during a Feb. 18 conference call, Sears' CIO at that time, Gerald Kelly Jr., read from a script, asking CSC to cap the charges at $58 million for a termination for convenience initiated prior to May 31. "If CSC does not choose this path, we will be forced to consider declaring a material breach under the agreement," Kelly was quoted as saying. In its motions, CSC said it "refused to submit itself to Sears' extortion tactics."

In documents filed in court by Sears, though, the Hoffman Estates, Ill.-based retailer said it had notified CSC of 65 individual breaches of the agreement since the contract took effect. Sears claimed that CSC's performance was "a dismal failure from the start" and by September had become "so poor that [CSC] was forced to summon a 'red team' from its corporate offices to assess its deficient performance."

According to Sears, CSC graded itself as poor in nearly every category of contract performance, including service delivery, project planning and tracking, and team organization and strength.

Sears said it provided CSC with formal written notice on March 18 that the IT services firm had been in material breach of the agreement for several months and that it expected CSC to "cure" the breaches within 30 days.

Requests Denied

Meanwhile, CSC claimed that on the same day, prior to receiving Sears' notice, it filed suit in U.S. District Court in Chicago seeking a temporary restraining order and preliminary injunction to stop Sears from terminating the contract for cause. It also asked the court for a declaratory judgment that it had not materially breached the contract.

Without ruling on the merits of the case, the district court judge denied CSC's requests. A representative for the district court said last week that the records of the case were not available. However, both Sears and CSC said in their appeals court documents that the judge ordered them to begin arbitration. CSC requested emergency arbitration, but that was also denied, according to Sears.

Sears and CSC declined to comment on the court cases and arbitration proceedings last week, as did lawyers for both companies.

John Thomas, a technology law partner at Squire, Sanders & Dempsey LLP in Tysons Corner, Va., said he hasn't seen many long-term outsourcing deals become as "publicly messy" as the CSC-Sears one has. But he noted that the fees for terminating contracts for convenience are typically significant so vendors can recoup their heavy upfront expenses.

"The process of gearing up, bringing in people and all the work that goes into the first six to 12 months of an outsourcing relationship is very expensive," Thomas said.

Even so, Akiba Stern, an attorney at Morgan, Lewis & Bockius LLP in New York, said it's likely that CSC and Sears will settle the case privately, as parties involved in these types of disputes typically do.

In its SEC filing, CSC said it also will "vigorously pursue recovery" from Sears for the investments and commitments that the outsourcing vendor made in connection with the contract, including its spending on software, property and equipment.

Despite their legal differences, the two companies continue to work together on IT matters. CSC is obligated to provide IT services to Sears for an unspecified period following the termination, according to the retailer's SEC filing.

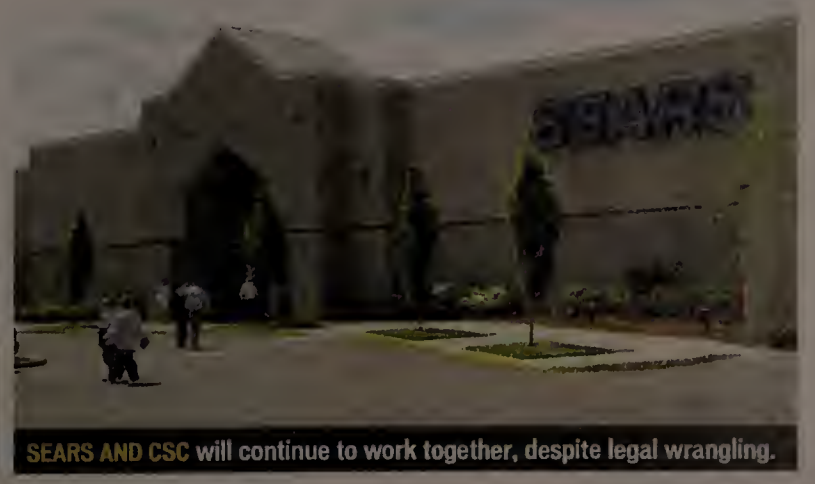
The contract called for CSC to provide IT infrastructure support services for Sears' desktops, servers, Web site systems, voice and data networks, and decision-support technology. **54534**

CSC

> **No great leap is required to see what happened here. Sears was willing to pay $58 million in fees, but not the full $96 million it owed. When CSC refused to cap the fees and give up the $38 million to which it was contractually entitled, Sears crafted a plan to save itself all fees.**
>
> *— From an emergency motion for injunction pending an appeal filed with the U.S. Court of Appeals for the 7th Circuit in Chicago*

Sears

> **CSC did not propose adding additional resources or making changes in its existing plans in order to cure the breaches identified by Sears. Instead, CSC's response consisted of a combination of denials, evasions and misstatements of CSC's responsibilities under the agreement.**
>
> *— From a legal memorandum in opposition to CSC's emergency motion for injunction*



SEARS AND CSC will continue to work together, despite legal wrangling.

EDS Sues State Over Contract

ELECTRONIC DATA SYSTEMS CORP. last week filed a lawsuit against the North Carolina Department of Health and Human Services alleging that the agency improperly awarded a $171 million IT services contract to another vendor in April 2004.

The agency chose Affiliated Computer Services Inc. (ACS) over EDS and Unisys Corp. for the five-year Medicaid system pact. EDS, which had held the contract for the past 27 years, filed its lawsuit in North Carolina Superior Court after losing a string of administrative appeals.

In the lawsuit, EDS alleges that the Health and Human Services Department failed to follow its own procedures for reviewing and awarding the contract. The vendor also claims that state CIO George Bakolia last month improperly rejected a summary judgment by an administrative law judge who had ruled in favor of EDS in the contract dispute.

In addition, EDS alleges that the state made procedural errors during the review and appeals processes. It is asking the court to reverse the contract award to Dallas-based ACS.

EDS spokesman Travis Jacobsen said the company is challenging the award because it could set a precedent in deals with other states. The lawsuit "holds the state accountable to its processes," he said, adding that EDS has won six of six similar Medicaid contract renewals in other states over the past 15 months.

Danny Lineberry, a spokesman for North Carolina's Office of Information Technology Services, said Bakolia wouldn't comment on the matter because of the pending litigation.

A spokeswoman for the Department of Health and Human Services also declined to comment about the lawsuit.

ACS spokeswoman Linda Graham said officials at the EDS rival are confident that it will prevail in the legal battle. "It was a fair procurement, and we have been upheld all along," she said.

The contract with ACS calls for the replacement and continued operation of the North Carolina Medicaid Management Information System.

– Todd R. Weiss

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FRANKLY SPEAKING ■ FRANK HAYES

The Trust Buster

TRUST. THAT'S THE POINT of the Sarbanes-Oxley Act: making sure investors can trust our financial statements. Of course, for anyone involved in Sarb-Ox compliance projects, it feels more like trust has been hanged, drawn, quartered, electrocuted, run over by a steamroller, then stood up against a wall and shot, just for good measure. With Sarb-Ox, it seems as if nobody in corporate America will ever be allowed to trust anyone ever again.

So there may not seem to be much comfort in the Sarb-Ox guidelines issued last week by the SEC [QuickLink 54486]. The agency's staff now says we *can* trust each other — just a little bit.

That means not every single piece of financial data has to be rigorously controlled at every step in its life cycle; corporate management is allowed to use a little discretion. And auditors don't have to be grim, silent inquisitors; they're allowed to tell management what's wrong, explain why it's wrong and even suggest ways of fixing problems.

It's only a little ray of trust in what's become a very dark Sarb-Ox world. But right now, we can use all the hopeful signs we can get.

If you're not doing Sarb-Ox work, you're probably wondering what the big deal is. Why are top management and IT staffers all so bitter about it? Sure, it's a huge project — documenting and testing all the controls on financial information and putting controls in place where they're missing. But isn't that really a lot like Y2k was — a huge project that won't add value at most businesses but still has to be done?

Answer: No. With Y2k, we were saving the world. With Sarb-Ox, we're agents of the inquisition. Y2k was a heroic sprint for an immovable finish line. More than a year into our Sarb-Ox work, it feels like a death march that will last forever.

And for what? Trust. But it seems as if for every drip of trust that investors will gain, we drain away gallons. Users can no longer be trusted. Neither can managers, or even our own IT people. Every access to data has to be logged, every spreadsheet checked, every number crunch verified.

In an uncomplicated, smoothly professional world, that would be a simple, one-time chore. In the very messy real world of business IT, it's immensely complex and never-ending. And it's overlaid by that "trust no one" ethos. We've always depended on trust to get through crises, meltdowns, glitches and ordinary momentary stupidity. We've trusted one another to reach in and fix the problems.

But now that's forbidden. No reaching in. No out-of-process fixes. No trust. The job of Sarb-Ox implementors is to institutionalize paranoia. No wonder they're bitter.

Worst of all, we know it's not our fault. IT faces the lion's share of Sarb-Ox "deficiencies" because we're in charge of the data that will make up those trustworthy financial statements. Our "deficient" systems worked fine for years. Now, because crooked executives at a few companies played fast and loose with their numbers, we're the ones who have to rebuild trust we never deserved to lose.

That's why those new SEC guidelines truly *are* good news. They're the first sign that Sarb-Ox won't be an ever-expanding spiral of paranoia. The focus, the SEC now sensibly says, should be on the greatest risks of financial misstatement. It's time to start replacing endless inventories and mindless checklists with informed management judgment about where those risks lie.

And in IT, we can start to think again about the best ways of protecting business data integrity — controls that are effective, not just exhaustive.

And then maybe we'll begin to remember once more that investors want to trust not just the numbers, but also the people behind them. **54496**

FRANK HAYES, *Computerworld*'s senior news columnist, has covered IT for more than 20 years. Contact him at **frank_hayes@computerworld.com**.

SHARK TANK

Remember, No Live Demos!

Pilot fish's boss is demonstrating the company's new e-mail client. "He asked one user what was his most important e-mail and then promptly proceeded to delete it to show how it could be salvaged," fish reports. "In the course of restoring it, he inadvertently retrieved about 300 other deleted messages and, while they were in the process of restoring, tried to delete them again." In the end, they're gone – and so is the important e-mail. User: "So now you're going to show me how to get that e-mail back?"

Unbooted

To make sure antivirus software is updated, pilot fish makes the process part of a log-in script on each user machine. But when a not-very-new virus infects a PC, fish gets chewed out in public for letting it happen. It's not until he finally talks to the user that he realizes what went wrong. "Turns out the user had not logged off and on in months, so she never got updates," fish groans. "The IT manager told her boss, but the boss still blamed me for it."

Unclear on The Concept

CIO e-mails all employees to tell them that external Web mail has been deemed a security risk, and it's being blocked – but the change won't affect sending or receiving messages through company e-mail. "One employee responds via her company e-mail account saying that she didn't realize we had company e-mail and wanted to know who she should contact to get her set up," sighs a pilot fish watching it all. "The CIO forwards her e-mail to the network team, requesting that she be set up."

All in a Day's Work

At the end of a rough shift getting an e-mail server working again, stressed-out sysadmin pilot fish goes to get a haircut. "My stylist struck up some conversation to break the ice: 'Looks like you had a long day,' " says fish. "Without giving it much thought, I said, 'Yeah, my boss killed a server and I spent the rest of the day cleaning up the mess.' Her jaw dropped. It took me a couple of seconds to realize what I had said. I guess she thought I worked at a restaurant."

Key Issue

After vendor rep makes his pitch, he offers to leave his presentation with pilot fish on a USB key drive. "Accessing the USB key later reveals several other documents in the Recycle Bin folder on the USB key," fish says, "including an internal corporate presentation complaining about the lack of corporate support for the solution he was offering us. Who says it pays to recycle?"

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